

**The value of pre-discharge occupational therapy home
visits for patients who have had a stroke;
Perceptions of patients, occupational therapists and
experts**

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Abstract

Study overview and aims

Pre-discharge occupational therapy home visits after stroke are routinely conducted during the discharge planning process. However, there is limited research evidence about the value of these visits for patients.

The aims of this study were two fold. Firstly, to identify and report on the value of pre-discharge occupational therapy home visits for patients returning home after stroke. Secondly, to gain knowledge to inform the design of future research into home visits after stroke.

Method

A qualitative methodology was used. The research method consisted of semi-structured interviews with three participant groups; experts, senior occupational therapists and patients. Interviews were recorded, transcribed verbatim and analysed using a thematic analysis approach.

Key findings

Following thematic analysis of the thirty four interviews that were conducted (six with experts, 20 with senior occupational therapists and eight with patients), the findings indicate the perceived value of pre-discharge home visits after stroke:

- Home visits after stroke offer a bespoke assessment of a patient's individual needs at home when compared to hospital assessments.
- The value of pre-discharge occupational therapy home visits has been heavily influenced by their perceived costliness. Consequently the number of home visits seems to have reduced. However, opinions were mixed about their cost-effectiveness.

- There were differing values placed on completing pre-discharge occupational therapy home visits for the purpose of risk management and equipment provision.
- Pre-discharge occupational therapy home visits were perceived to be of greatest value to patients with moderately severe levels of disability and/or a reduced social support network on their return home.
- There was mixed opinion, both within and across the participant groups, about the value of completing pre-discharge occupational therapy home visits with patients who had cognitive impairment after stroke.
- Suggestions were made across the participant groups as to how pre-discharge occupational therapy home visits after stroke could be improved to provide better value to patients.

Conclusion

The main values of the pre-discharge home visit identified by this research were minimising risks, improving independence in activities of daily living, enabling a better quality of life and supporting a patient to adjust to life after stroke.

There were mixed opinions about these purposes, making it difficult to generalise the value of pre-discharge occupational therapy home visits after stroke. However, the overarching value of the pre-discharge home visit remained its individualised and bespoke nature. In essence, this intervention was felt to be tailored to individual patients, as it varied depending on the impact of stroke, home environment and meaningful activities of daily living.

Future research investigating pre-discharge occupational therapy home visits after stroke needs to consider the value of different purposes for which home visits are undertaken. This would support the development and implementation of future practice.

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Chapter One: Introduction

1.1. Chapter overview

Occupational therapists (OTs) play a key role in enabling patients to become independent in performing meaningful activities of daily living (ADL). Occupational therapy (OT) after stroke leads to better patient functional outcomes, but the specifics of effective interventions remain unclear (Steultjens et al., 2003; Legg et al., 2006).

This study investigated the perceived value of pre-discharge OT home visits after stroke. Although this intervention was routinely used with patients who had had a stroke, there was limited research evidence to support its clinical effectiveness and there was little further research exploring the way in which key stakeholders perceive and understand the value of the practice (Chibnall, 2011). It was also an area of OT practice that had come into question in view of its perceived cost-effectiveness (Barras, 2005). Hence the need for further investigation into the value of pre-discharge home visits for patients who have had a stroke.

This chapter introduces pre-discharge OT home visits after stroke, drawing on the literature on stroke, stroke rehabilitation, OT after stroke and pre-discharge home visits. It then goes on to outline the details of this study.

1.2. Stroke

1.2.1. Definition and symptoms

Stroke is defined as *“a clinical syndrome, of presumed vascular origin, typified by rapidly developing signs of focal or global disturbance of cerebral functions lasting more than 24 hours or leading to death”* (WHO, 1978).

The most common symptoms of an acute stroke are; sudden weakness or numbness to the face, arm or leg on one side of the body (known as hemiparesis), difficulty walking, sudden loss of speech and language, confusion, loss of vision, severe headache, dizziness, loss of balance or coordination or a sudden fall, fainting or unconsciousness (Warlow et al., 2008; WHO, 2013).

1.2.2. Causes, classification and prognosis

Stroke has two main causes; a blockage of the blood supply to the brain, classified as an ischaemic stroke, or a rupture of a blood vessel supplying the brain, which is classified as a haemorrhagic stroke.

Ischaemic stroke

A blockage of the blood supply to the brain results in death of the brain tissue, this is called ischaemia and leads to an infarct. Ischaemic strokes account for approximately 85% of strokes (Brown et al., 2006). The three most common causes of ischemic stroke are i) large artery atherosclerosis, ii) an embolism from the heart, iii) intracranial small-vessel disease (Norrving, 2010: 28).

Haemorrhagic stroke

A haemorrhagic stroke occurs when a blood vessel supplying the brain ruptures (haemorrhage), which accounts for approximately 20% of strokes (Freitas et al., 2005). Haemorrhagic strokes can be of intracerebral or subarachnoid origin and the main causes are high blood pressure (hypertension) or, less commonly, aneurysms.

Patients admitted to hospital are required to have a computerised tomography (CT) brain scan within 12 hours of admission to determine the nature of their stroke. This enables effective management (Royal College of Physicians, 2012). The type of stroke a

patient has provides an indication of its pathology, severity, ongoing treatment and likely prognosis.

Prognosis

The death rate within the first 30 days after stroke is higher for patients who have had a haemorrhage, but patients who survive a haemorrhage at one year have better outcomes (Bamford et al., 1991; Brown et al., 2006). Patients with major ischaemic stroke i.e. Total Anterior Circulatory Infarct (TACI) also have a higher risk of death one month post stroke (40%) when compared to a Partial Anterior Circulatory Infarct (PACI) (4%), Lacunar Infarct (LACI) (2%) and a Posterior Circulatory Infarct (POCI) (7%), (Harwood et al., 2011).

Prognosis for independence, one year post stroke, varies depending on both subtype of stroke and initial neurological severity, with only 10% of those having a TACI and surviving becoming independent. However outcomes for independence for those who survive and have other subtypes of infarct are better; PACI (70%), LACI (67%) and POCI (75%) (Harwood et al., 2011).

Older age, coma at onset and persistent neglect are indicators for a poorer outcome (Brown et al., 2006:74). Patients with depression after stroke (approximately one third), are also likely to have a poorer functional outcome, worse social outcome and to respond less well to rehabilitation (Lincoln et al., 2011: 284).

1.2.3. Risk factors

Individuals who have had a stroke, have a ten-fold risk of having another: one in five strokes are a recurrent stroke (Harwood et al., 2011). Secondary prevention is therefore of key importance, which includes an understanding by both clinicians and patients about stroke risk factors.

The most prevalent and modifiable cause of stroke is hypertension (high blood pressure) (Freitas et al., 2005). The risk of hypertension is influenced by lifestyle factors over which individuals have an influence, such as smoking, but also factors individuals cannot control, such as their age and ethnic origin. Women are at a slightly higher risk of having a stroke in their lifetime, in part due to their higher life expectancy, but stroke incidence in men is approximately 25% higher (Stroke Association, 2013). Afro-Caribbean and Asian populations have a higher incidence of stroke than Caucasian populations (Brown et al., 2006).

1.2.4. The impact of stroke

Socio-economic impact

For patients who survive a stroke, difficulties include: returning home, socialising with friends and family, returning to work and participation in leisure activities. Decreased participation in these activities can result in social isolation, hence the possibility of the social impact of stroke being huge.

Saka et al. (2009) reported that the treatment of, and productivity loss arising from, stroke results in total societal costs of £8.9 billion a year, with treatment costs accounting for approximately 5% of total UK NHS costs. The cost to the NHS is £3 billion a year (National Audit Office, 2010).

Disability/dependency after stroke

With the ongoing development of the evidence base for the medical management of acute stroke, including the use of thrombolysis, mortality rates and levels of dependency have been reduced (Wardlaw et al., 2009). However, stroke remains the third largest cause of death in the UK and, perhaps more significantly, the largest cause of disability (Department of Health, 2010).

As would be expected, those patients who initially have severe neurological impairment are much less likely to regain independence (13% for severe impairment and 4% for very severe impairment) when compared to those who have moderate to mild impairment (37% for moderate impairment and 68% for mild impairment) (Harwood et al., 2011).

Approximately 50% of people who survive a stroke are dependent in activities of daily living (ADL). Ten percent are dependent with toileting, 10-30% with washing and bathing and 20% with dressing, one year post stroke (Warlow et al., 2008).

It has been reported that 300,000 people are living with moderate to severe disability in the UK at any one time, as a result of stroke (National Audit Office, 2010). Therefore, the need for ongoing rehabilitation that aims to reduce the impact of stroke is significant in improving a patient's chances of recovery after stroke.

The burden of stroke for patients and their families, and economically, is substantial, hence stroke being high on the public health agenda. The national stroke strategy (Department of Health, 2007) reflects the importance placed on addressing the burden of stroke, and emphasises the need for those commissioning health and social care rehabilitation services to prioritise 'life after stroke'.

1.2.5. Stroke Rehabilitation

"Early and planned multidisciplinary rehabilitation remains the cornerstone of stroke management because it is applicable to most stroke survivors. Furthermore, 300 randomised controlled trials provide a sound foundation for evidenced- based practice in stroke rehabilitation, supplementing and often confirming decades of clinical experience"

(Kalra and Harris, 2010: 254).

It is widely recognised that people who have had a stroke are more likely to be alive, independent and living at home one year after their stroke, if they receive specialist multidisciplinary care (Langhorne, 1997; Department of Health, 2007; Royal College of Physicians, 2012).

A systematic review reporting the benefits of specialist stroke rehabilitation showed that better outcomes were most apparent in units based in a discrete ward (Stroke Unit Trialists Collaboration, 2007). Research has also shown that, for patients with mild to moderate levels of disability after stroke, early supported stroke discharge teams are equally effective in providing rehabilitation at home, and can assist in reducing hospital length of stay (Langhorne, 2005).

The Royal College of Physicians (RCP) guidelines (RCP, 2012) and the National Institute for Clinical Excellence stroke guidelines (NICE, 2013) recommend that patients receive multi-professional assessment and treatment post stroke. The National Service Framework for older people, standard five, also states that all stroke patients *“should be treated by specialist stroke teams within designated stroke units”* (Department of Health, 2001:65).

As stroke can have a major impact on a person’s ability to perform ADL, the inclusion of OT in the multi-disciplinary specialist team is essential and forms part of the stroke guidelines (RCP, 2012).

1.3. Occupational therapy after stroke

Occupational therapy has been defined as:

“The purpose of occupational therapy is to enable people to fulfil, or to work towards fulfilling, their potential as occupational beings. Occupational therapists promote

function, quality of life and the realisation of potential in people who are experiencing occupational deprivation, imbalance or alienation. They believe that activity can be an effective medium for remediating dysfunction, facilitating adaptation and recreating identity” (College of Occupational Therapists (COT) 2009: 1).

“Occupational therapy is a client-centred health profession concerned with promoting health and well being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life.” (World Federation of occupational therapists (WFOT) 2010:1).

OTs view people as occupational beings who need to be able to participate in meaningful occupations to enable health and well-being (COT, 2009). OTs assess the impact of stroke on an individual’s occupational performance within the context of the person’s social and physical environment. Occupations can be split into three main categories: personal, productive and leisure (Law et al., 2005). Different approaches can be taken by OTs in the recovery of a patient’s occupational performance, these include: restoration of an underlying impairment/bodily function, learning to complete ADL in a new way, compensating for a loss of function by the use of equipment or modification of the environment in which the task is performed.

Evidence base for OT after stroke

The OT concise guide for stroke (RCP, 2012) provides a summary of the evidence for the most effective interventions for certain impairments post stroke. The evidence base for OT after stroke has continued to develop over the past 20 years, with research indicating that patients have better functional outcomes if they receive OT. This evidence is now outlined.

Systematic reviews of the literature that have evaluated the efficacy of OT after stroke indicate OT improves functional outcomes, inclusive of both primary ADL (Personal and

mobility), extended ADL (e.g. domestic and leisure skills) and social participation (Steultjens et al., 2003; Walker et al., 2004; Legg et al., 2007). The odds of a poor outcome in terms of death or institutional care were also reduced for those receiving OT (Legg et al., 2006). It should be noted when considering the implementation of research, that the majority of this evidence had been completed in the community setting as opposed to in-patient hospital settings (Legg et al., 2006).

Older patients and those less dependent patients were found to benefit more from OT interventions than younger patients and the more dependent stroke population (Walker et al., 2004). However, interestingly a developing area of stroke research was the investigation of the effect of OT in care homes, where older populations lived, who were likely to have a higher level of dependency. The findings of a cluster RCT showed patients receiving OT were less likely to deteriorate in terms of their ADL performance (Sackley, 2006). This indicated OT was of value in preventing a reduction in ADL performance, as opposed to enhancing independence in ADL.

Research that has investigated OT for specific impairments after stroke remains limited (Carter et al., 1983; West et al., 2008; Hoffman et al., 2010), making it difficult to determine precise OT interventions that improve ADL outcomes. Steultjens et al. (2003) found no significant difference between control and intervention groups for specific OT interventions, including: training of sensory-motor functions, provision of splints, training of skills, training of cognitive function and education to family and caregivers. However, there has been some promising research into the efficacy of executive function interventions after stroke i.e. those focussing on higher level cognitive functions such as flexibility in thinking and problem solving, as highlighted in a recent systematic review by Poulin et al. (2012).

Targeted OT after stroke has been shown to improve stroke survivors' independence in ADL. However, the impact of specific OT interventions such as the pre-discharge home

visit, for people who have had a stroke, remains unclear and the cost-effectiveness of OT after stroke is yet to be adequately addressed (Logan, 2011). Future studies that evaluate the implementation of research into practice, and the longer term effects of OT after stroke, are also required.

A lack of evidence and the perceived expense of pre-discharge home visits had caused this intervention to come under scrutiny (Patterson and Mulley, 1999; Barras, 2005), potentially resulting in the removal of them as a key indicator for the RCP stroke sentinel audit, which were based on critically reviewed research evidence and used as performance measures for stroke units in the UK (RCP, 2008).

1.4. Pre-discharge occupational therapy home visits after stroke

For the reader's clarification the term 'pre-discharge home visit' or 'home visit' is used throughout this investigation to refer to:

"A visit to the home of a hospital in-patient which involves an occupational therapist in accompanying the consumer to assess his/her ability to function independently within the home environment or to assess the potential for the consumer to be as independent as possible with the support of carers" (COT, 1990:1)

It is also acknowledged that the pre-discharge home visit has been referred to in previous research as a 'home assessment'.

In order to distinguish pre-discharge home visits, from other types of home visits that take place after stroke, i.e. access visits and discharge home visits, each of these is now defined.

Access visit definition

An access visit (also referred to as an environmental visit), is an assessment of the home environment without the patient, to specifically identify potential problems that a patient may face with access both into and within their property.

Discharge home visit definition

A discharge home visit takes place on the day of a patient's discharge from hospital, and is usually completed to set a patient up at home and identify ongoing rehabilitation goals that can be continued by community therapists.

There has been a drive in recent years to reduce the level of disability and dependency caused by stroke (Department of Health, 2007). This included ensuring stroke survivors were supported to live as independently as possible and enabling health and wellbeing, through participation in their wider community. Home visits after stroke potentially supported patients in this process, during the transition from hospital to home and were a routine part of OT practice.

Stroke guidelines recommend that, *"Before discharge of a patient who remains dependent in some activities, the patient's home environment should be assessed and optimised, usually by a home visit by an occupational therapist"* (RCP, 2012: 145).

However, there remained limited evidence to support this intervention and research into the effectiveness of home visits for the general elderly population, had proved difficult. This was potentially due to ethical concerns about withdrawing home visits, when under routine care patients would have usually had a home visit (Lannin et al., 2007). Specific investigation into the value of home visits after stroke was also limited (Chibnall, 2011). Investigation of home visits after stroke was therefore important, in order to generate evidence to support guidelines for this intervention.

The 2006 stroke sentinel audit (RCP, 2006) indicated that home visit practice varied considerably across the UK, with some units completing home visits with the majority of stroke patients, and others completing few home visits. The picture of national practice of home visits after stroke was therefore unclear. With the perceived value of this practice being unknown, measuring the effectiveness of home visits was difficult, in part due to different centres completing different numbers of visits, but also because little was known about the actual content of home visits after stroke.

In view of the limited previous evidence to support home visits after stroke and the perceived cost and variability of this intervention, the Home Visit after Stroke (HOVIS) study was planned.

1.5. The Home Visit after Stroke (HOVIS) study

The HOVIS study consisted of two main investigations. A feasibility RCT of pre-discharge home visits after stroke was undertaken to identify the feasibility of undertaking a larger multi-centre RCT, in terms of recruitment and use of appropriate outcome measures. A qualitative study was also completed to investigate the purpose and value of pre-discharge home visits after stroke.

Background: Implementation of research in to practice

The HOVIS study was funded by the National Institute for Health Research (NIHR) Collaboration for leadership in Applied Health Research and Care for Nottinghamshire, Derbyshire and Lincolnshire (CLAHRC NDL). The NIHR was aware that high quality research was not always translated in to practice, hence CLAHRC aimed to assist with the implementation of research into practice at all levels from the design to the completion and dissemination phases.

The CLAHRC built on Sir David Cooksey's report 'A review of UK health research funding' (Cooksey, 2006), which concluded that, although good progress has been

made in some areas, further work was needed to ensure that publicly funded health research is carried out in the most effective and efficient way, in order to facilitate rapid translation of research findings into health and economic benefits.

The Medical Research Council's (MRC) framework for trials of complex interventions, as described by Campbell et al. (2000), highlights sequential phases of research to achieve implementation of high quality RCTs (MRC, 2000). The ultimate success of research lies in its ability to be implemented in uncontrolled settings and therefore the MRC framework (Campbell et al., 2000) also highlights the importance of ensuring relevant theory and modelling is addressed at the foundation of the research process. This includes qualitative investigation that seeks to generate theory. The HOVIS study was at the modelling/exploratory trial phase of the research continuum (MRC, 2000).

Prior to starting the HOVIS study, a number of potential implementation issues were identified. The HOVIS study recognised that home visits were an entrenched part of an OT's role (Welch and Lowes, 2005), therefore any guidelines indicating a potential change in practice as a result of RCT findings, could be met with resistance. The research team was also aware of the variability in practice across the UK (National Sentinel Audit, 2006). The reasons for this were unknown. It was therefore felt important to investigate national practice: why OTs practice in different ways, and what the perceptions were of the value this practice had to offer patients after stroke. Therefore alongside a feasibility RCT, the HOVIS study incorporated an in-depth qualitative investigation into the perceptions of home visiting practice after stroke.

Feasibility Randomised Controlled trial (Exploratory trial)

The HOVIS feasibility RCT took place in a stroke rehabilitation unit in an English city that included patients from both rural and urban geographical locations. Patients were randomised to have either a home visit (intervention group) or a hospital interview (control group). Due to concerns about OTs' reluctance to randomise patients and thus

withdraw home visits from certain patients, a third arm to the trial was incorporated. Those patients for whom the OTs felt it was 'essential' to have a home visit were also approached to take part in a cohort study (Appendix A: home visit essential criteria). The HOVIS study aimed to ascertain if it would be feasible to carry out a larger multi-centre trial, which would, in turn, aim to produce robust evidence as to the effectiveness of pre-discharge home visits after stroke.

1.6. The present study: A qualitative investigation into the value of pre-discharge home visits after stroke

The author was a member of the HOVIS study team, and led a specific discrete sub-study which qualitatively investigated the perceived value of home visits for patients who had a stroke. The author acknowledged the importance of gaining an understanding of what pre-discharge home visits can offer patients prior to their discharge, as perceived by stake holders who influence and who were influenced by this practice. It was believed that gaining an understanding of the value of this practice would assist in the effective design of future home visit trials, based on the theoretical understanding developed about the value of the practice. The findings could then be used to design a home visit intervention, the content of which would reflect what is perceived to be of value by key stake holders. This is referred to as 'modelling' in the Medical Research Councils (MRC) Framework for trials of complex interventions as it *"develops an understanding of the intervention and its possible effects"* (MRC, 2000: 14) before going on to comparing the intervention with an appropriate alternative. In this case this qualitative research was completed alongside an exploratory trial.

The research question

The aim of this specific study was to identify the value of pre-discharge home visits after stroke as perceived by those who influence and who are influenced by this practice. The research question was as follows:

What is the value of a pre-discharge occupational therapy home visit after stroke?: Patients', senior occupational therapists' and experts' perceptions.

The research aims were as follows:

1. To investigate the perceived value of home visits after stroke.
2. To explore and compare perceptions of the value of home visits after stroke, by those individuals who influence and who are influenced by this practice.
3. To consider how the perceived value of home visits should influence the development of future research investigating the effectiveness and value of pre-discharge occupational therapy home visits for people who have had a stroke.

1.7. Research outline

This study will further explain the theoretical basis for the research, in chapter two, by reporting the findings of the literature review that was undertaken. Chapter two outlines and discusses the evidence base that existed for the value of pre-discharge home visits after stroke prior to this study commencing, and identifies gaps in the literature.

Chapter three describes the research methodology, including the author's ontological position and the research epistemology. The method of data collection and the thematic analytical processes used are also described.

The study findings are described and explored in chapters four, five and six. These individual chapters present the findings from the analysis of interviews undertaken with the three stakeholder groups.

Chapter seven draws together and interprets the key findings to form a discussion comparing and contrasting perceptions of the value of this practice as identified from the stakeholder groups. The discussion considers both the similarities and differences in perception and generates theoretical assumptions about the findings.

Chapter eight concludes by reporting the key findings relating to the perceived value of pre-discharge home visits after stroke and the implications for home visit after stroke practice and future research.

Chapter Two: Literature review

2.1. Introduction

The literature reporting the value of home visits after stroke was identified in order to provide an indication of previous research on this topic.

This chapter outlines the literature search method including the inclusion and exclusion criteria of the search. It then presents and discusses the findings of this review, before drawing conclusions.

2.2. Literature review method

The literature relating to the value of home visits after stroke was systematically searched and reviewed. The literature search initially took place in March 2010 and was subsequently reviewed in July 2011 and March 2012. Search engines that focused on allied health related topics; Cinahl, Medline and PsycINFO data bases, were used to search the literature. The British Journal of Occupational Therapy (BJOT) library was also searched for relevant literature and the author contacted the College of Occupational Therapists (COT) for theses that had been donated relating to pre-discharge OT home visits. The reference lists for those papers obtained were also used to search for relevant literature that investigated pre-discharge home visits.

The Critical Appraisal Skills Programme (CASP) was used to assist the author in reviewing the research papers, in terms of their rigour (CASP, 2012). CASP (2012) is a critical appraisal programme designed to help find and interpret the best available evidence from health research.

2.2.1. Inclusion criteria

Initially the literature search included 'occupational therapy' and 'home visits' and 'stroke' in the title and/or the abstract by using the following key words: 'occupational'

AND 'therapy' AND 'home' AND visits' and combining this search with a search for 'occupational' AND 'therapy' AND 'stroke'.

The search included evidence available from 1990 - March 2012 only. This was decided in view of major health and social care reforms made as part of the NHS and Community Care Act (1990) and changes made in the provision of health and social care at this time. Therefore articles relating to home visits prior to this were felt less likely to relate to current home visiting practice. The search was restricted to research published in English, but did include papers originating from outside of the UK. The literature search focused on available evidence regarding the purpose of pre-discharge home visits, evidence for the effectiveness of home visits, the frequency of home visits and the literature reporting perceptions of home visits. These categories combined were felt to provide an overview of the available literature investigating the value of home visit practice, relating specifically to stroke patients.

2.2.2. Exclusion criteria

Those studies that related to access visits and post-discharge home visits were excluded from the search.

2.3. Literature review results

The initial search found two papers that specifically focused on pre-discharge home visits after stroke (Clarke and Gladman, 1995; Chibnall, 2011). Neither of these two papers specifically investigated the value of home visits; one was a survey about the content of home visits (Clarke and Gladman, 1995) and the other a research viewpoint (Chibnall, 2011), which included a summary of the available evidence.

Due to limited stroke specific evidence, , the author widened the search to include papers that were non-stroke specific and focused on general OT pre-discharge home visiting practice for adults/elderly patients. A further 24 papers were identified from

the search engine search ('Occupational' AND 'Therapy' AND 'Home' AND 'Visits'), examining the reference list of articles identified and the COT thesis collection: The literature that was found relating to the general practice of home visits included:

- Three systematic reviews (Patterson and Mulley, 1999; Barras, 2005; Atwal et al., 2012),
- Two randomised controlled trials (Pardessus et al., 2002; Lannin et al., 2007),
- One cohort study (Johnston et al., 2010),
- Five surveys (Bore, 1994; Chatfield, 1995; Hale, 2000; Patterson and Mulley 2001; Lannin et al., 2011),
- Two literature reviews (Mountain and Pighills, 2003; Welch and Lowes, 2005),
- Four audits, (Franklin, 1997; Renforth et al., 2004; Harris et al., 2008; Hibberd, 2008),
- Five qualitative method research studies (Durham, 1992; Clark and Dyer, 1998; Nygard et al., 2004; Atwal et al., 2008a; Atwal et al., 2008b),
- One Delphi study (Barras et al., 2010),
- One case comparative study (Taylor et al., 2007).

The findings of the literature search are presented in the four categories highlighted in the search method, which combine to provide an overview of the literature available on the value of home visits.

2.3.1. The purpose of pre-discharge home visits

Home visits were described as a traditional part of OT practice which were routinely completed to assess a patient's ability to perform ADL within the home environment and to make recommendations as to how functional difficulties may be overcome, assisting in the discharge planning process from hospital (Mountain and Pighills, 2003; Welch and Lowes, 2005; Hibberd, 2008). Home visits after stroke were reported to include an assessment of safety and addressing mobility issues, often by provision of equipment (Clarke and Gladman, 1995). OTs also completed home visits to assess carer support required and to assess patients' mental status /cognition (Hale, 2000).

Barras et al., (2010) attempted to formulate home visit criteria by undertaking a Delphi study in Australia to establish core components of the home assessment. Barras et al., (2010) reported that the most essential items in a home assessment were 'safety of patient', 'equipment provision' 'home layout', 'functional problems', 'falls hazard', 'seating/lounge'. This study suggested that there was a focus on physical and safety aspects of a patient's home environment as opposed to community and domestic retraining which were thought to be non-essential; however, these were identified as important in an 'ideal world'. As 80% of people who have had a stroke will experience movement problems as a result of physical impairments (Stroke Association, 2013) and stroke survivors are also at a higher risk of having a fall (Jørgensen et al., 2002), the main reasons for completing a home visit reported in the literature are likely to be of value to the general stroke population.

Interestingly, patients with a diagnosis of stroke have previously been excluded from home visit studies due to the perceived need for home visits for this group of patients (Chatfield, 1995). This could pose potential ethical issues of withdrawing this intervention for research purposes. Indeed, Hale (2000) reported stroke being one of the most common diagnoses for which an OT would consider completing a home visit.

This reflects the complex array of different impairments people face after stroke, the resultant disability and how individuals manage on their return home. Along with the physical impact of stroke, reduced participation in ADL can also be due to impairments of cognition, perception, vision and emotion. These should be taken into consideration when evaluating the purpose and content of home visits for this population.

2.3.2. The effectiveness of pre-discharge home visits after stroke

There was no stroke specific research which had investigated the effectiveness of home visits using an RCT design. However it had been suggested that this intervention may be partly responsible for better outcomes for patients who have had a stroke and could improve the transition from hospital to home (Clarke and Gladman, 1995). This could have been due to patients being more familiar performing ADL tasks in their own home, which provided a more realistic reflection of their needs, than the performance observed in hospital (Harris et al., 2008). As a result patients became better equipped to solve problems identified, due to more in-depth knowledge and observation of these difficulties within the home environment.

Taylor et al. (2007) investigated the added value home visits provided when compared to a hospital interview and a hospital assessment, by comparing the outcomes of the Safety Assessment of Function and the Environment for Rehabilitation (SAFER) for each of the interventions. Twenty six patients in a specialised geriatric acute care rehabilitation unit in Canada took part. The results indicated that there was no statistical difference between the number of problems identified between the hospital assessment and the home visit. However, there was a statistically significant difference in the mean number of problems identified between the client interview and the home assessment, with more problems and recommendations being identified on the home visit. This would suggest that the performance aspect of an assessment, provided the added value in terms of the number of recommendations identified to support patients.

However, the conclusion that functional assessments in the home environment are more effective for a seniors' discharge planning than hospital based assessments or interviews could be questioned; the research did not rigorously measure the impact of the recommendations, only the number of recommendations made. The sample size was also small.

Clarke and Gladman (1995) reported on the recommendations made following home visits, specifically for patients who have had a stroke, in a retrospective audit of 151 home visit reports. The most common problem was mobility around the home (88%), and the least common was social contact (9%). The most frequently recorded solution to a patient's difficulties was provision of aids and equipment (91%), with the least common being day centre or luncheon club referral (3%). Harris et al. (2008) reported similar findings from their retrospective audit, and their main recommendations resulting from home visits was equipment provision, with safety recommendations constituting the greatest number of recommendations.

The literature indicated that observing a patient performing functional tasks in their home, prior to discharge, provided a deeper insight into their needs, which seemed to result in more recommendations being made. These recommendations tended to largely relate to equipment/adaptations. However, the implementation and value of these recommendations was unclear, and if OTs were not indicating who was responsible for implementing home visit recommendations, they may not have been realised for the patient, hence the value of the visit was diminished (Franklin, 1997). The literature also indicated a need to investigate patient perspective and experience following their return home, about these issues.

It would also be of value to identify who prioritised the patients' needs on the pre-discharge home visit. As the intention was to determine the value of these visits for patients, their priorities need to be taken into consideration.

Interestingly Chatfield (1995), suggested that home visits were more effective in terms of highlighting specific problems unrelated to equipment provision, although it was found that more equipment was provided following a home assessment when compared to a hospital assessment, with the exception of transfer equipment. This suggests that although home visits were of value to patients for a number of reasons, ultimately the focus was on equipment provision and safety recommendations, due to the need to support patients to return home safely. The 'ideal world' reasons reported for completing a home visit, as identified by Barras (2010,) may become more of a priority once a patient has returned home.

Despite the potential outcomes of home visits after stroke, the lack of evidence to support the effectiveness of this intervention required attention. There was a growing need to provide evidenced based interventions and to use NHS resources cost-effectively. With the home visit being deemed a costly intervention and the reported variability in practice (National Sentinel Audit, 2006), its effectiveness had been called into question (Barras, 2005; Harris et al., 2008). The available evidence to support the value of the home visit was scarce (Patterson and Mulley, 1999; Mountain and Pighills, 2003; Barras, 2005;) and, more specifically, there was limited stroke literature to support home visits (Chibnall, 2011). Barras et al. (2005) completed a systematic review of the literature of OT home visits and commented on the paucity of both the quality and quantity of the available research. It was also suggested that some patients did not always conform to the recommendations made by OTs on home visits (Durham, 1998), further adding to the need to investigate their value.

In an attempt to address this lack of evidence, Lannin et al. (2007) completed a feasibility RCT in Australia of pre-discharge home visits for patients who were receiving rehabilitation following falls and joint replacements. Although Lannin et al. (2007) concluded that it was feasible to carry out such research, only 10 patients were recruited over a three month period despite there being 38 patients available. This may

have been due to the concerns raised by OTs about withdrawing home visits, possibly making it difficult to research this topic robustly. Lannin et al. (2007) suggested more effective recruitment strategies need to be used.

Johnston et al. (2010), in a cohort study in Australia, identified that pre-discharge home visits were a preventative measure for falls, but this was only in non-neurological patient groups. In comparison, Pardessus et al. (2002) completed an RCT, but found home visits did not reduce the risk of falls or hospital readmission. However, there was a significant difference found in the loss of autonomy between the control and intervention groups, with those patients receiving a home visit less likely to lose their autonomy. Although these findings should be taken with caution, due to the small sample size (60), it is of interest that the current focus of home visits would appear to be patient safety and prevention of falls, yet there are indications home visits may be more effective in preventing loss of independence in ADL.

Despite the lack of evidence, Chibnall (2011), based on her clinical experience, is of the opinion that home visits do have an important role to play in OT practice in stroke rehabilitation. This is likely to be the view of OTs, for which this has become an entrenched part of their role, hence the need to identify the cost-effectiveness of this practice. Chibnall (2011) argued the gap in the available evidence *“requires urgent research to improve stroke care and appropriately distribute precious therapy time, resources and funding”* (Chibnall, 2011: 131).

2.3.3. Frequency of pre-discharge home visits after stroke

No papers were found that specifically related to the frequency of pre-discharge home visits after stroke. However, an Australian study has reported a potential general reduction in the number of home visits being completed in recent years (Lannin et al., 2011).

Lannin et al. (2011) indicated an estimated 50% reduction in the number of home visits being undertaken when compared to the previous five years. Reasons suggested by clinicians for this reduction included a decreased length of hospital stay and reduced time to complete home visits. These reductions, and the given reasons, are likely to be comparable to those in the UK, as there is a drive to reduce acute hospital length of stay and discharge patients home sooner after stroke (National Health Service Institute for Innovation and Improvement, 2009). However, as patients were being discharged earlier, it would have been reasonable to presume that if they were returning home, they were doing so with a higher level of disability/posed risks, than if they had had longer in-patient hospital rehabilitation. Therefore, considering that the purpose of home visits was identified to reduce safety risks and address equipment needs, a reduction in the number of home visits being completed, may be contradictory, when patients were being discharged earlier. However, higher levels of dependency does not always account for higher levels of equipment provision/adaptation recommendations on home visits, when compared to lower levels of dependency (Renforth, 2004). Therefore, it may be difficult to estimate the frequency of home visits undertaken based on patients levels of dependency. The development of Early Supported Stroke Discharge (ESSD) services, may also account for some of the reduction in the need for pre-discharge home visits, as patient's are being discharged home with a team of specialists, inclusive of OT, who can address the issues that hospital OTs may have on a pre-discharge home visit.

As data on home visits were no longer collected, there was limited recent evidence to indicate national practice for patients being discharged home after a stroke in the UK. However, in a survey undertaken by Patterson and Mulley (2001) of 239 NHS trusts the number of home visits was reported to be on the increase. It was reported that between 11 and 40 home visits were completed per month in 65% of the units surveyed. In the 20 (61%) rehabilitation units who took part in the survey, it was estimated that over half the patients received home visits. Seventy percent of the units

believed that the number of home visits was rising and there was a perception this could have been influenced by social care workers using it to form part of their social assessment. Patterson and Mulley (2001) expressed concerns about this, based on the lack of evidence for the effectiveness of home visits, and again urged that more clinical trials are undertaken.

Interestingly, over a decade later, there remains limited research, but it was perceived that home visits were now on the decline, most likely because of the time they were believed to take and the believed cost implications. However, many patients who have had a stroke encounter major challenges in their ability to carry out everyday activities, both physically, cognitively, emotionally and socially, and returning home can be a daunting and anxiety-provoking time. If a home visit is able to support patients in this process, further investigation should evaluate the effect of home visits on a patient's outcomes. Equally, if the home visit does not offer value to a patient's rehabilitation experience, it would seem an unnecessary waste of time and resource to complete them routinely. Hence the need for future research to evaluate the cost-effectiveness of these visits.

2.3.4. Perceptions about pre-discharge home visits

There was no literature found that specifically related to perceptions of home visits after stroke. Therefore the review focused on perceptions of general home visiting practice.

2.3.4.1. Patient perceptions

When reviewing the value of the general practice of home visits Atwal et al. (2012) recognised the importance of identifying service user perspectives, and completed a systematic review of patient experiences of home visits in acute care settings. Fourteen studies from a combination of published and unpublished research were identified but none of these met the thematic synthesis inclusion criteria being used. Atwal et al.

(2012:2) concluded that “*insufficient attention has been paid to older adults’ perceptions of pre-discharge home visits in acute care*”, and reflected on the importance of reviewing this topic from a service user perspective.

Hale (2000) also highlighted the importance of gaining an understanding of an individual’s experience when investigating home visits, after disparity between reported home visit practice from quantitative data collection methods and ‘actual’ experience reported in qualitative data collection methods.

Atwal et al. (2008b), in an analysis of 22 semi-structured interviews, reported that some older adults can find home visits a daunting and anxiety-provoking experience, although carers generally find the experience valuable. Atwal et al. (2008b) argued that the current model of home visits does not promote patient health and wellbeing. Although offering an insight into patient perceptions, the conclusion does not reflect the positive comments that were made by the patients with regards to their experiences. The author also acknowledges these findings are limited to one NHS trust in England. However, Clark and Dyer (1998) investigated patients’ responses to OTs’ home visit recommendations and also reported a key finding to be patient anxiety, resulting from a fear of the pass/fail nature of the home visit. Comparatively, Hibberd (2008) interviewed four patients from two in-patient intermediate care settings, about their perspective on having a home visit. She found the general feedback positive, although comments were made by one of the patients about the lack of time spent on their home visit and their feelings of worry associated about being tested.

The anxiety a patient may face on a home visit has the potential to influence the outcomes of the assessment, and the question of whether the resulting anxiety for the patient overrides the benefits of the visit needs to be addressed. Mountain and Pighills (2003), in their review, proposed that patient anxieties were likely to have a negative impact on the home visit assessment for those in acute hospital care, and highlighted

the need to allow for this when considering the outcomes of a one-off and, usually, brief observation.

This anxiety, although evident in the literature, does not reflect the experiences of all patients approached. Nygard et al. (2004) completed structured interviews with geriatric patients in Sweden, following their home visit from hospital, about their views on the home visit interventions. Seventy three out of 130 follow-up statements from patients indicated that they were 'explicitly satisfied' with the interventions, in comparison with only 11 of the 130 situations, in which the patients reported that they were dissatisfied. Dissatisfaction usually resulted from assistive devices or home modifications not being supplied. Following content analysis it was identified that some patients had alternative solutions or perceptions of their problems when compared to what had been suggested by their OT on the home visit. Notably in 41 of the situations, the patients had expressed an alternative solution when compared to what had been recommended. These alternative solutions included; transferring with a relative, doing what they used to do, and refraining from occupations due to feelings of insecurity or a lack of motivation (Nygard et al., 2004). Although the patients were explicitly asked to be honest about their home visit experience, the same OT completed both the home visit and a post discharge home visit including the interview, potentially making clients reluctant to express any negative views. Exploration of the patient's perceptions is also limited to a content analysis of specific topics as opposed to an in-depth investigation and analysis of the patient's experience.

These findings are, however, comparative to that of Clarke and Dyer (1998), who reported that certain patients found their own ways of managing or identified different needs at follow-up to those identified on the home visit. This raises a concern about the value of the OT recommendations on the home visit, as patients may not adhere to them, which has potential cost and/or safety implications.

Despite reports of patient anxieties and in some cases patients finding alternate ways of coping to those recommended by OTs, home visits have continued to be viewed by OTs as supporting patients in a smooth transition from hospital to home.

2.3.4.2. Perceptions of therapists

The available literature investigating the perceptions of OTs working with older patient populations, suggests home visits were believed to be of value in assessing a patient's functional abilities at home, providing the necessary equipment to return home, educating the family, and planning an appropriate and safe discharge (Durham, 1992; Nygard et al., 2004; Atwal et al., 2008a).

Durham's (1992) research, which focused on in-patient rehabilitation in a USA unit, investigated the perceptions of therapists following home visits with patients who had had a brain injury. The therapists (both occupational and physical therapists) who participated completed a survey that reflected their perceptions of the benefits of a therapeutic home visit. Nine of the 14 respondents felt that the home visit was extremely beneficial in assisting the patient to make the transition from the hospital setting to their home environment, with only one of the therapists stating it did not enhance this transition. All respondents felt the home visit added to their total picture of the patient. Durham (1992) concluded that all patients returning home should receive a home visit to assist in confirming or changing their therapy programme. In the current economic climate, this may no longer seem justifiable considering the lack of evidence and the cost implications. The study may be criticised for having a small sample size for a survey (14 therapists reporting on seven home visits), which only focused on the perceptions of those therapists in one rehabilitation unit. Also, although informative, it would seem inevitable that if you ask a group of therapists whether their interventions are of value or not they will respond positively in favour of the intervention. It's the reasoning behind why therapists perceive home visits to be of

value and what the content of the visits are, that is required in order to further understand the value of this practice.

A more recent study, (Atwal et al., 2008a), investigated OT perceptions of OT home visits by analysing reflective diaries. Reflective diaries were completed by six OTs, based on their experience of undertaking a home visit with older adults in an acute care setting. The OTs were asked to base their reflections on the answers to ten questions. Five themes developed. The OTs reported that the benefits of a pre-discharge OT home visit included listening to families' concerns, discussion of a patient's needs and supporting patients to accept changes in their occupational routines.

Atwal et al. (2008a) reported that the OTs often did not consider the patient's occupations on discharge home and recommended that OTs need to clinically reason the rationale for a pre-discharge home visit, focusing on how this could enhance patients' quality of life. The themes that were reported were, however, very similar to the topic guide questions and read as surface level findings as opposed to offering deeper interpretation, potentially affecting the rigour of the research. This paper is also limited to one hospital trust and the author reflects that the findings could have been biased due to one OT completing eight of the fifteen dairies. However, the investigation does reflect the competing issues OTs face when completing home visits, in terms of discharge facilitation and patient autonomy.

It would seem that there could be differing perceptions of the value of pre-discharge home visits amongst therapists, patients and carers. To address this, Bore (1994) conducted a questionnaire survey to identify if OTs, patients and carers had similar concerns at the point of a patient's discharge from a community hospital. Bore (1994) also wanted to establish whether these concerns were addressed effectively by a home visit. The findings indicated general consensus on the reasoning for a home visit between patients and OTs, but there were differing views on satisfaction for certain aspects of home visits. The patients appeared to find certain topics, such as social

isolation, much more helpful to be addressed on a home visit than the OTs did. It was suggested OTs re-examine how such topics are addressed and prioritised on the home visit. Although there was a lack of methodological reporting, limiting reliability and validity, the findings were of interest as more recent literature would suggest topics such as social isolation were no longer perceived as a priority when conducting a home visit; the focus of the home visit being to address safety issues and minimise risks to the patient when returning home (Barras et al., 2010). However, Barras et al. (2010) concluded that although the essential elements should improve standards of care and discharge planning, OTs should still consider the 'ideal world' elements i.e. those relating to community re-integration, to optimise community independence. Provision of community rehabilitation services in different geographical areas is likely to differ, which could impact on pre-discharge home visit priorities i.e. those areas that have ESSD and/or community stroke services may feel less inclined to focus on community re-integration than those areas which have limited community stroke services. However, the general findings of the literature search reflect a focus on safety at the point of discharge as opposed to functional independence and community participation, for the majority of in-patient services.

Importantly, Hale (2000:15) pointed out the potential effect of neglecting a patient's longer term needs: *"Health professionals are often too concerned with safe discharge to think far beyond to the longer term implications resulting from social isolation. However, if occupational therapists do not deal with this issue, they are abdicating from their role which encompasses the responsibility of considering all areas of human occupation"*. It was evident that OTs may have conflicting roles of planning a safe discharge whilst also addressing a patient's longer term needs and wishes.

Although offering an insight into OT and patient perspectives, the available literature was limited and did not incorporate the views of patients who have had a stroke and who were likely to be facing different challenges from those patients admitted with

other illnesses/disabilities. This was concerning considering this was a routine part of OT practice and up until 2006 was an RCP quality key indicator for practice (RCP, 2006). In order for future research to investigate the effectiveness of this practice, investigation of the value of the pre-discharge home visit for people who have had a stroke, as perceived by those who influence home visits and who are affected by its outcomes, is essential.

2.4. Summary

There was a lack of both qualitative and quantitative research to support the value of home visits for patients who have had a stroke. There was also, more generally, a lack of evidence for home visits within in-patient hospital settings across the UK, Europe, Australia and Northern America. The majority of the research reported has taken place outside of the UK, yet this remains a common part of OT practice across the UK (Patterson et al., 1999). The limited literature did however indicate that patients who have had a stroke were perceived as more likely to require a home visit by OTs, when compared to other patient groups.

The limited available literature indicated that home visits were perceived to be of value in supporting a patient's transition home, educating the patient and their carers, promoting independence and providing equipment to ensure a safe transition from hospital to home. Although the literature highlighted the need for OTs to consider a patient's longer term goals, independence in ADL and quality of life on a home visit, the impact of reduced length of stay in acute care hospitals was believed to have focused the purpose of home visits on risk elimination.

Home visits continued to be a routine part of OT practice after stroke, but research into the value of this intervention as perceived by patients and practitioners has been neglected. Hence this study aimed to explore the perceptions and opinions of key

stakeholders as to the value of this practice, in order to identify its implications for patients and to use this evidence to influence the design of future home visit after stroke studies.

Chapter Three: Methodology

3.1. Introduction

This chapter presents the purpose of this study and the approach taken to this investigation. As this study formed part of a wider investigation into the effectiveness of home visits after stroke, its context is presented within the wider investigation outlined in chapter one.

A description of the ontological and epistemological position upon which this research methodology was based is provided in this chapter. This is in order to clarify what the research could offer in terms of its findings in relation to the theory generated. Details of the specific research methods and procedure, including ethical considerations follow.

This chapter also addresses how rigour was achieved and the researcher's reflections on data collection and creation is summarised at the end.

3.2. The Study Purpose

This study was a discrete qualitative study undertaken in parallel with a larger investigation into OT home visits after stroke.

As there was previously little known about current home visiting practice after stroke, it was difficult to verify their effectiveness, and therefore this study aimed to generate new knowledge about the value of this practice for patients, by completing an inductive, thematic analysis.

It was believed that this approach could support the design of future trials which would encompass measures of the key values placed on this practice.

As stated by Pope and Mays (2000:5) *“qualitative research can classify phenomena, or answer the ‘what is X?’ question, which necessarily precedes the process of enumeration of Xs”*, as is the aim of quantitative research methods. In this research investigation, the ‘what is X’ question was ‘what is the value of completing a pre-discharge home visit for patients who have had a stroke?’ The investigation of this question complemented the process of quantitatively investigating the effectiveness of the value of home visits after stroke, in a feasibility RCT.

The present study (a discrete sub study of the larger HOVIS study) was a qualitative investigation that consisted of semi-structured interviews with three participant groups, to identify the process and content of current home visiting practice in the UK. The study investigated the views, perceptions and experiences of a number of stakeholders (experts, senior OTs and patients) in relation to the value of pre-discharge home visits after stroke. Views of those individuals who influence and who have experience of home visiting practice, but who equally may have differing perceptions of this practice, were required to gain an understanding of the value of this practice.

3.3. The study approach

The author’s ontological position and the research epistemology are now explained.

3.3.1. Ontology: The author’s philosophical position

When considering the approach to the research question and, ensuring the research gave a rigorous account of the research phenomena, the author had to consider her own ontological position of the world. As stated by Giacomini (2010: 129/130) *“before seeking anything, one must have a prior notion of what could be found empirically and what could not”*. This depends on *“beliefs about how the social world can be studied and how the validity of knowledge established by such research might be assessed”* (Pope and Mays, 2000:2). Pope and Mays (2000) did however acknowledge that not all

qualitative health research is driven by a certain epistemological or theoretical perspective, but rather by a desire to overcome a practical problem which may determine the methods employed.

It is acknowledged at this point that this research was in part driven by the practical issue of identifying the perceived value of this practice in order to support the design of future research. However, the author was aware that how this study was approached and what could be gained from the findings would be influenced by her own beliefs and views of how knowledge is developed. Therefore in order to establish what can be gained from the interpretation of the outcome of this research, the author's views of how theory can be generated are explained, as this directly influenced what the research sought to gain, how the research was carried out and what was found.

Giacomini (2010:130) described a model of health research traditions, by reference to an ontological and epistemological neighbourhood with an ontological continuum from realist to idealist. The realist is described as seeking a single reality unaffected by the research process, whereas the idealist believes there is not one single reality to be found and research findings are the researcher's representations of a phenomenon. The author's view of the world sat between these two extremes and could be considered as pragmatic. It was therefore believed that the data gained through this research did not respond directly with reality and that there was not a single truth about the phenomena to be found, as would be the case with a realist view where the reliability and validity of the findings would be sought. Neither was it believed that there was no existence of any external reality, as with a relativist/idealist approach (Ballinger, 2006; Giacomini, 2010). The findings were the researcher's representations and influenced by the context of the research (Giacomini, 2010:131).

It was believed that there was an underlying reality to be explored (in this research; the value of home visits after stroke) but that various parties would have different views

and explanations about the phenomena. Hence, an exploration of different stakeholder experiences and perceptions of the value of this practice. Ballinger (2006) described this position as a 'subtle realist'. Taking this position, the author acknowledged the influence she herself had on the research findings and aimed to demonstrate the trustworthiness of the findings by the use of a detailed description and an audit trail of the findings to reflect the influence that she had on how the findings developed. This is opposed to a realist perspective where the author would have sought to minimise the influence she had on the findings, making them objective.

A qualitative approach was used to maximise both a richness and breadth of data in order for the findings to be generalised. However, as this research was influenced by a pragmatic approach and certain practical restrictions of the study sample, the author accepted that the research was exploratory and may not relate to all in-patient stroke settings across the UK.

It was hoped that by outlining the author's ontological position and using a detailed description to document the research processes, the reader would be enabled to; decide how relevant the findings were to the setting in which they work, consider what the findings could add to the knowledge base of home visits after stroke.

3.3.2. Epistemology: A qualitative perspective

This research aimed to explore the potentially diverse practice of home visits after stroke, in order to gain an understanding of its value. The experience of having an OT home visit was likely to be context specific in terms of the patient, the effects of their stroke and their home environment; all of which would have an impact on the process, content and value of a home visit. Stakeholders involved in decisions about home visits may also have differing perceptions and opinions of this practice, depending on their individual experiences. The research aimed to draw out both similarities and

differences in perceptions in order to make sense of the perceived value of home visiting practice. A qualitative approach was therefore used which has been identified as important in healthcare research, as its views of a person's experience are non-reductionist and holistic (Holloway, 2008). This approach offered a number of advantages, including, opportunities to probe and explore the participants' views, whilst allowing for flexibility in the research questioning (Holloway, 2005).

A quantitative approach would not have enabled this information to be gathered as the context is refined and any variables are isolated and manipulated (Murphy et al., 1998). This study aimed to go beyond generating figures relating to the nature of home visit practice, and explore the perceived value of home visits for patients who have had a stroke. The research would not be limited by a defined set of questions and outcomes or seek consensus of opinion, as would be the outcome of a quantitative approach. Rather, the aim was to identify the participants' opinions and experiences of home visit phenomena and interpret participant responses to answer the research question 'what is the perceived value of pre-discharge home visits for patients who have had a stroke'.

The findings were driven by the data and were therefore inductive in nature and not determined by any pre-existing theory. The research did not have a pre-existing set of theories to be tested, rather the data generated aimed to assist in developing new ideas about the value of home visits after stroke, based on key stakeholders' perceptions and experiences.

3.4. The Study Design

3.4.1. The Research Team

The study design was led by the author in collaboration with the HOVIS research team and through initial consultation with the team's steering group. The HOVIS research team consisted of the principal investigator, a research associate, a research OT (the

author), a qualitative social scientist and a diffusion fellow (a researcher employed specifically to assist in the implementation of the research).

The steering group consisted of a patient representative, a statistician, a rehabilitation academic/OT by background, a psychologist and a neurology rehabilitation consultant. The study design evolved over a number of meetings where the practical elements of the investigation were discussed.

3.4.2. Ethical Considerations

Ethical approval for the HOVIS study including this sub-study was provided by Berkshire Research Ethics Committee (Ref: 10/H0505/41). Research governance approval was issued by Derby Hospitals NHS Foundation Trust.

Research quality

The author was aware of the need to design high quality research in order to prevent resources being wasted on a poorly planned study. The significance of this research has been explained previously. It will add to a previously limited area of research and can be drawn on when carrying out future investigations into the effectiveness of home visit practice. High quality was assured through sampling methods, the design of the interviews and systematic analysis techniques.

Informed consent

All of the participants were provided with written information and a verbal explanation for the patient participants about what their participation in the study would involve, in order for them to give informed consent to take part. Informed consent was gained from all of the participants for the interviews to take place and be audio recorded (Appendix D: participant information sheet and Appendix E: patient participant consent form). Verbal consent was provided by the experts and the senior OT participants on the interview recordings.

Confidentiality/Anonymity

The participants were informed that information gained during interview would be recorded and stored securely on a University of Nottingham database and only be accessible by the research team and authorised bodies associated with the research. The participants were advised that if they wished to say anything off the record they were to inform the interviewer and this would be excluded from the data transcription process and would not be reported. In the event that a participant had reported poor practice they were advised that the researcher would have to inform the appropriate agency, in order to act in the best interest of patient care.

All of the interview transcripts were anonymised following transcription to ensure that no identifying information remained. When writing up the findings the author also ensured participants were not identifiable.

3.4.3. The sample

The research consisted of three participant samples, each are separately explained.

3.4.3.1. Expert participant sample and recruitment

In order to investigate the value of home visiting practice after stroke, it was felt important to gain an insight into the perceptions of those individuals who influence current stroke guidelines and evidence-based practice. This would ensure that the findings were based on the views and perceptions of experts in this field. It was, therefore, decided to explore the perceptions of participants, who due to their expertise, status and position were able to influence national OT home visiting practice for patients who have had a stroke.

The research team defined an expert as an *“influential and/or a lead figure in the practice of OT home visiting and/ or stroke rehabilitation”*. The research sample purposely included experts from a range of clinical and academic backgrounds, who

were lead figures in home visiting practice and/or stroke rehabilitation. By doing so, a rich set of data was collected, enabling the author to report on a full and sophisticated understanding of the phenomena (Rice and Ezzy, 1999) capturing the perceptions of experts from a wide range of professional experiences. The research included recognised national and international academics who had conducted previous research on home visits and stroke clinicians representing UK professional bodies. The combination of academic and clinical experience was felt to provide an understanding of the views of those individuals who influence this practice either directly or indirectly. The research team excluded experts who did not speak English.

The research team discussed and identified experts who met the inclusion criteria based on their experience and knowledge of the field. Clinicians and/or academics from a range of disciplines from both the UK and abroad were identified, with the aim of capturing a diverse range of perceptions, experiences and opinions on this topic. Seven expert informants were identified and approached to be interviewed. The expert participants were approached by letter, sent initially by post and followed up with an e-mail. The letter (appendix B) explained the aim of the investigation and what taking part in the interview would involve for the participant. Experts were informed that they were being asked to provide their opinion and perceptions of OT home visit practice, due to their knowledge, experience and skill base within OT home visiting and/or stroke rehabilitation. It was stated in the letter that they were being approached as an expert in this field. The author contacted the experts two weeks post receipt of the letter to identify if they were agreeable to take part.

3.4.3.2. Senior OT participant sample and recruitment

The second phase of the study recruited senior OTs working in acute and/or rehabilitation in-patient stroke settings.

OTs working in hospital stroke services were responsible for making decisions about a patient's ability to return home and whether or not to undertake a home visit. OTs were also responsible for what happens on a home visit. Therefore it was felt of paramount importance to gain knowledge of their perceptions about the value of this practice, in order to provide an understanding of why, how, and to what degree home visits are of value.

The team decided that OTs who were senior in their role would have sufficient experience working in stroke care to focus specifically on home visiting practice after stroke, as opposed to the general practice of home visiting. It was also considered that senior OTs would have a leadership influence on practice across the team that they worked in, hence, reflecting a general team approach. No specific criteria with regards to years of experience working in stroke care were set as the team did not wish to exclude any OT in a senior position and were aware that levels of experience may vary. The research included OTs from both acute and rehabilitation NHS hospital settings. This was felt to add to the diversity of the sample and reflect the views of OTs working across the stroke care pathway.

A letter sent via e-mail explaining the research was sent to all OT members of the College of Occupational Therapists Specialist Section for Neurological Practice (COT SSNP), asking for senior OTs who worked in NHS in-patient stroke settings to volunteer to take part in the research (Appendix C). The letter explained what taking part in the research would involve for the participant. The research team initially received e-mails from 75 senior OTs who wished to volunteer to take part. Of these, 20 OTs were selected through a mapping process, whereby the team selected OTs from each of the regional health authorities across the UK ensuring a combination of rural and urban locations. This number was felt to represent a range of perceptions and opinions, but was also a manageable set of data to analyse. All the participants were sent an e-mail

to thank them for volunteering which also informed them whether they had been selected to take part in the research or not.

3.4.3.3. Patient participant sample and recruitment

Gaining the perceptions of patients who had experienced a home visit after stroke was of key importance to this investigation and the study aimed to investigate the patient perspective. A convenience sample of patients who had taken part in the HOVIS study was recruited. The OTs undertaking the home visit completed the Westmead Home Safety Assessment (Clemson, 1997) to guide the home visit and record its outcomes. Eight patient participants was considered to be a feasible number of patients to recruit in the available time, and a manageable amount of data to gain a broad understanding of patient perceptions of their pre-discharge home visit experience.

Patients who had received a home visit as part of the HOVIS study and who were able to give informed consent to take part in an interview were approached to take part in this study. We did not wish to exclude patients with cognitive, or communication difficulties as these account for a large proportion of the problems patients face post stroke. However, the research aimed to gain an understanding of the patients' experiences, and in order to do this the patients needed to be able to express themselves verbally and have an understanding of what was being asked of them. Each case was considered on an individual basis, and speech and language therapist support in the recruitment stage was used as required with patients who wished to take part but who had communication difficulties.

Patients were approached in order of their recruitment to the HOVIS trial and were those who were receiving a home visit. An information sheet was given to the patient in order for them to consider if they would like to take part or not (Appendix D). The author, who recruited the patients, talked through the information sheet with the

patient and their family where applicable, to provide both verbal and written information about the study. The patients were given 48 hours to consider if they would like to take part.

3.4.4. Interviews

3.4.4.1. Why were interviews chosen?

Interviews were chosen to explore the participants' perceptions and beliefs about home visits after stroke, in order to understand the value of this practice and to compare opinions within and across the three participant groups.

As stated by Kelly (2010:309) *"In qualitative interviewing, the researcher is explicitly seeking to gain access to the knowledge, experience, and perspectives of research subjects, rather than organising the beliefs, experience, and perspectives of research subjects into pre-set categories"*. As previously described, the author aimed to explore inductively the participants' perceptions of the home visit phenomenon. Interviewing was therefore chosen as the method of obtaining an in-depth understanding and knowledge of the participants' perceptions and experiences. Hansen (2006:69) noted *"this degree of understanding of the participant's point of view cannot be achieved using any other data collection method"*. Murphy et al. (1998) suggested that qualitative interviews are often seen as particularly suitable for exploratory or hypothesis generating types of research, as they enable an exploration of participants' understanding of the world and their behaviours based on their experiences. Hence, semi-structured interviews were the chosen method of data collection.

3.4.4.2. Semi-structured interviews

The research aimed to acquire a broad understanding of the interviewees' perceptions of home visits after stroke and therefore the interviews were designed to be semi-structured with a topic guide used. It was decided that semi-structured interviews

would allow the research agenda to be set whilst the interviewee determined the information produced (Green et al., 2009). In doing so the research remained inductive and was driven by the participants' responses, in order for the value as perceived by the participants to be explored, as opposed to any pre-existing agenda of the research.

The research team was aware of the likely variability in practice across the UK and therefore, as opposed to limiting the participants' responses, as would be the case with a survey, the semi-structured interview approach allowed the potential differing experiences and perceptions of the participants to be explored, and the participants to have some freedom to lead the discussion as they wished.

Hale (2000) investigated the OT characteristics influencing home visit decisions and reported a difference between the quantitative and qualitative data collected. Hale (2000) supported the importance of research that identifies patient perspectives in more detail as with qualitative approaches.

Due to limited previous research in this area, one-to-one interviews were felt to be most appropriate to explore individual participant's views and experiences in more depth, as opposed to focusing on specific elements of the home visit, as was likely to be the case in a group discussion. There was also a desire for the participants to feel comfortable expressing potentially differing opinions, which may be restricted in a group situation as with focus groups.

However, it was acknowledged that interviewing in a group situation may have enriched the participant's 'story' as stories can be *"triggered to counter, contrast or bring up similarities"* (Benner, 1994:109). However, due to restrictions of time and money, it was felt impractical for the study to get a group of experts/OTs/patients together to discuss this research topic.

3.4.5. Consideration of other qualitative methods

When considering the most appropriate methods of data generation to answer the research questions, posed by the study, the author also considered alternative methods, which are now briefly described.

3.4.5.1. Observation

Observation of patients and OTs during the course of a home visit was a consideration to investigate this experience. This method derives from an ethnographical approach, whereby participants are observed in their natural environment and the researcher immerses themselves in the environment, with the aim of gaining a real life understanding of a particular culture. Murphy et al. (1998) pointed out that one of the advantages of completing observational studies is that they address some of the critics' views, that interview responses are not a guide to actual behaviour, but an interpretation of what happened. This study, however, accepted that the views expressed by its participants were those expressed at a certain place in time and did not aim to seek the 'truth' of actual behaviour, but rather perceptions of the value of home visiting practice and influences on this as believed by the participants. Even when completing observational research, the researcher's own perceptions of what they see cannot be completely removed, and therefore it was felt important to ask the participants their views rather than observe these. Observational research is potentially more time consuming than completing interviews, both in terms of data collection and analysis, which further influenced the research method decision.

3.4.5.2. Documents

The content of home visit reports could have been used to identify the interaction between OTs and patients on a home visit and the recommendations made as a result of the home visit. Participants could also have been asked to keep a diary and record their experiences of the home visit. This has the advantage of the data being grounded in the context of the participants as opposed to being led by the researcher, and also

decreases the potential reactivity of the researcher being present (Holloway, 2008). However, the practicalities of this method for the purposes of this research would have been difficult as the researcher aimed to gain a wide range of perspectives on home visiting practice and therefore wanted to engage participants from across different groups and settings. There was also consideration of the burden on participants having to complete a reflexive diary, this was therefore, not felt to be an appropriate method for this study.

3.4.6. The Interview guides

A topic guide for each of the participant groups was designed to ensure consistency across the interviews, and to allow areas of particular interest to the research to be explored, whilst being as flexible as possible (Appendices, F, G and H).

The interviews were designed to gain a broad understanding of the experts', senior OTs' and patients' perceptions of home visiting practice based on the following overall objectives for each participant group:

- To identify perceptions of the purpose of pre-discharge OT home visits after stroke
- To identify perceptions of the value of home visits following stroke.

The questions were designed to be open-ended and took a conversational approach to allow the interview to be both flexible and focused. When designing the topic guides the research team drew from the available knowledge on home visits, the research interests, and the research objectives, as suggested by Kelly (2010). This included knowledge of previous qualitative investigation into this topic which, albeit limited, assisted the team in considering both the available knowledge and also gaps in the evidence base. As the interviews were completed sequentially, with the expert

participant interviews completed first, followed by the senior OT interviews and finally the patient interviews, the guides were iteratively redeveloped having been informed by the findings from the data sets already generated.

Kvale (1996) offered some recommendations which were considered when designing the interview questions. The research used a combination of introducing, direct and probing style questions, for example; *“could you tell me what you think is involved in current home visit practice for people who have had a stroke?”* (Introducing question) and; *“Do you think there are any disadvantages to undertaking pre-discharge home visits for people who have had a stroke?”* (direct question). The probing questions focused on the participants’ responses and ‘why’ questions, to explore explanations of the interviewees responses, for example; *“can you tell me a little more about why you feel completing the home visit to ensure patient safety is important?”*

Following initial discussion and identification of the key areas to be included, the topic guide was sent to the steering group for further feedback. After the expert interviews were completed the team met again to design the senior OT interview guide, and drew on the findings from the expert interviews when considering the topics covered in the interviews. The author led the design of the patient interview topic guide, and consulted the team and the patient representative from the steering group about the wording of the questions and topics covered.

The patient guide was less structured than the other two topic guides, due to the recognition that the patients would be talking about a single experience, whereas the expert and senior OT participants were drawing on a range of experiences.

It should be noted that the expert and senior OT interview guides were also used to collect data for the main HOVIS study, and therefore a more diverse range of topics were covered.

3.4.7. Pilot Interviews

A pilot interview was undertaken for each of the participant groups. The interviews were evaluated in terms of timing, language, and whether any questions needed to be added or amended.

3.4.7.1. Expert Pilot

An expert academic within the field of stroke and OT was interviewed to identify if the interview questions were appropriate in terms of the overall research questions. The interview was completed by the author, with the qualitative social scientist from the HOVIS team present in order to provide feedback on the interviewing technique. The interview lasted approximately 45 minutes. The interviewee was able to answer all of the questions, and gave positive feedback about its content in terms of the research question. However, as a result of the pilot interview an additional question with regards to the nature of reporting the outcome of the home visit was added. The qualitative social scientist fed back that the topics had been covered effectively, with the pilot interviewee being given sufficient opportunity to answer the questions. The author reflected positively on the interview, and became more aware of the need to focus on leaving time for silences, for the interviewees to consider their responses.

Further changes to the interview guide were made based on the research group's feedback. These changes mainly included wording and phrasing as opposed to the content of the questions.

3.4.7.2. Senior OT Pilot

A pilot interview was undertaken with a senior OT who worked in a neurological rehabilitation setting and had experience of working in stroke rehabilitation. The interview was again completed by the author. The interview lasted approximately 45

minutes. The interviewee was able to answer all of the questions. The interviewee gave positive feedback, and no changes were made to the topic guide at this stage.

Following further discussion the research team agreed it was important to include questions relating to access visits and discharge home visits (see definitions in Chapter one). The expert findings highlighted that OTs may use these alternate methods of assessment and therefore they were important to explore in order to put the findings in to context with the OTs' practice.

Due to practice at the site of the RCT, where pre-discharge home visits were regularly being completed with patients being discharged to nursing homes, it was also decided the interview should ask specifically about patients who were being discharged to nursing homes.

3.4.7.3. Patient Pilot

The patient interview topic guide was discussed with the patient representative on the HOVIS steering group. The patient representative was asked to give their opinion on the content of the questions based on their own experience. He felt the content of the questions was appropriate and that no changes needed to be made.

3.4.8. Interview procedures

3.4.8.1. Who conducted the interviews?

The expert interviews were conducted during 2010 by the author and the qualitative social scientist for the HOVIS study. The senior OT interviews were completed during 2010/2011 by four members of the HOVIS research team. The patient interviews were undertaken by the author between July and October 2011.

It was accepted that each interviewer would have different interview styles due to differing experiences, which could potentially guide the interviews in differing

directions. Hence, the topic guide was designed to provide a level of continuity to the interviews.

The author reflected how the interview process went, and recorded discussions with the research team in her log book. This enabled the author to consider her own position on the data collected, interactions with the participants, and later the analysis process. This is described as reflexive practice (Butler- Kisber, 2010), whereby the author sought to identify and acknowledge her own assumptions and the influence this had on the research processes.

The interviewers also reflected on the impact they themselves had in the interview situation in relation to each of the participant groups. The expert interviewees all held senior roles and had influence on stroke research and/or guidelines. The researchers in their roles had much less influence on practice guidelines, which was acknowledged when reflecting on the interview process. For example, the author had to acknowledge that she respected and was inspired by those experts she interviewed, which may have made it difficult to challenge certain opinions. As the interviewers had less academic and clinical experience than the experts interviewed, it was not felt that their position would have influenced the interviewees to withhold their perceptions. However, in order to address potential issues regarding power and hierarchy with the senior OTs, the interviewers did not inform the senior OT participants of their professional background, only their researcher status, to reduce the effect of this on dynamics of the interview.

The author limited any power relations between herself and the patients interviewed by not completing their home visits, as the patients home visits were the phenomenon of research interest explored in the interview. If the author had completed the patients' home visits, the information gathered in the interviews may have been

limited, as the patients may not have felt able, or have wanted to, disclose certain opinions.

3.4.8.2. How were the interviews conducted?

It was important that the participants felt comfortable to talk about the research topic (Kvale, 2009), therefore face-to-face interviews were the preferred choice. Face-to-face interviews enabled the interviewer to develop a rapport with the interviewee and ensured that participants felt comfortable in answering the research questions.

However, it was not practical for the research team to complete the interviews face-to-face with all of the participant groups, due to the time and cost implications. Therefore phone interviews were completed for some of the expert interviews, and all of the senior OT interviews. The patient interviews were undertaken face-to-face one week post discharge from hospital at their home at a time to suit them. This again was felt to reduce any power relations as the patients were at their own homes, as opposed to being in a clinical setting.

All of the interviews were recorded using a digital voice recorder with ear sets for the telephone interviews. Recording the interviews enabled a thorough in-depth analysis of the data, which would be difficult to accomplish with field notes alone. The interviewers discussed each interview informally after they had taken place. This allowed the interviewers to consider their own positions on what had been said and any feelings that were provoked by the interviews which may have affected the interview process. The author logged any specific relevant information as part of the reflexive nature of the research process.

Informed consent was gained from all of the participants prior to the interviews taking place.

3.5. Analysis procedures

3.5.1. Transcription

The interviews were transcribed verbatim into a word document either by an external transcription agency, for the expert and senior OT interviews, or by the author with regard to the patient interviews. The notations; IV for Interviewer, and HS#/HE#/P, were used by the author for senior OT/expert/patient text, respectively, when transcribing the patient interviews, but when these were later checked for accuracy by a colleague on the HOVIS team, the lines were re-numbered and the interviewer text was written in bold font. The transcripts were checked for accuracy by the interviewers for the expert and senior OT interviews, and a member of the HOVIS team for the patient interviews.

The author acknowledges transcribing all of the interviews would have assisted in the data analysis process, but due to time restrictions and the amount of the data collected, this was not feasible. All of the transcripts were anonymised and stored on a University of Nottingham secure server.

As the quality of the data transcript determines the accuracy of the interpretation (Silverman, 2005), the transcripts were cross-checked by two researchers against the original recordings to ensure accuracy. This included being mindful of non-verbal cues, such as pauses and delays, and attention to subtleties in sounds and noises made by the interviewer and interviewee.

3.5.2. Thematic Analysis

A six phase thematic analysis as described by Braun and Clarke (2006) was used to analyse the interview data. Braun and Clarke (2006:81) described thematic analysis as a flexible analysis method that is *“not pre-wedded to any pre-existing theoretical framework and therefore can be used within different theoretical frameworks”*.

Thematic analysis was used to identify meaningful patterns of data from across the individual data sets, which were analysed separately. The analysis of the expert participant data took place first, followed by the senior OT analysis and then finally analysis of the patient interview data. The analysis of data from each of the participant groups was then compared to identify similarities and differences in the perceptions of the three different groups of stake-holders, which are discussed in chapter seven.

The National Centre for Social Science Research (NatCen) stated that thematic analysis aims to answer the 'what' questions and has three key steps; i) detection (Familiarisation), ii) categorisation (assigning data to meaningful conceptual boxes) and iii) classification (assessing relationships between categories) (NatCen, 2011). Ultimately thematic analysis aims to compare systematically patterns of data. This was felt to be an effective method of analysis in this study, to explore and identify patterns of data that demonstrated the perceived value of home visits after stroke.

In thematic analysis, *"meaningful patterns, stances, or concerns are considered rather than more elemental units such as words or phrases"*, the aim being to clarify distinctions and similarities of the participants' experiences (Benner, 1994:115). Both the similarities and differences in the participant's perceptions of the value of home visits after stroke were explored, with the aim of generating theory based on meaningful patterns, as opposed to searching for specific commonalities. Therefore, during the analysis phases, it was ensured that negative cases i.e. those that did not form general opinion across the data sets, were not ignored during the interpretation, as opposed to searching for only similarities in responses.

The author independently analysed each of the data sets (expert, senior OT and patient) separately and then compared and discussed the themes from each of the participant groups; the findings are presented in chapter seven. Where possible the

author aimed to develop concepts based on the developing data and previous research findings.

The author discussed and reflected on the progress of her analysis with the team and her supervisors throughout the analysis process. The progress of data analysis was also an agenda item at the monthly HOVIS meeting, giving the author an opportunity to discuss and explain the findings of this research to the team.

The themes that developed captured a picture of what had been said by the participants about the value of home visits after stroke. At each of the analysis phases the author's personal influences i.e. views, opinions and experiences, were monitored, by using a reflexive log, through open discussion between the author and her supervisors, and reflection on the interviews as previously stated. The use of reflexive practice in qualitative research is now well accepted as the researcher is acknowledged as part of the research, which is considered throughout the research process (Finlay, 2003).

Consideration was made as to whether the interpretations of the data should be taken back to the interviewees. It could be argued that by doing this the interviewees could have validated what they meant. However, by attempting to validate the findings in this way the interviewee is given epistemological privilege, which in itself can cause problems (Mason, 2002), as what the participants agree to on one day may differ the next. This goes back to the perspective of the author taking a subtle realist approach as opposed to searching for a single truth and reality, as would be the case with a more realist approach.

Whilst taking a reflexive approach to considering subjectivity, the author accepted that the data collected and analysed reflected perceptions of an individual at a certain place in time with numerous potential influences. The thematic analysis method however,

demonstrates how the information gathered was analysed and interpreted to reflect transparently how the author came to her conclusions.

By acknowledging that different researchers would potentially generate different interpretations and meanings during the analysis process, whilst rigorously questioning ones motives, opinions and orientations, this research aimed to produce a trustworthy and evidenced account of the participant's perceptions on this topic. The author was aware that she was the main research tool and therefore had to demonstrate through writing how the knowledge gained from participants was received, perceived and constructed (Holloway, 2005).

The six phases of thematic analysis as described by Braun and Clark (2006) that the analysis followed are now described. Each of these phases was undertaken separately for each of the participant data sets: expert, senior OT and patients, respectively.

Phase 1: Familiarising yourself with the data

At this phase the author 'immersed' herself in the data, so she was fully engaged and familiar with all of the narrative, prior to any further analysis. This involved repeatedly reading the transcripts and listening to the recordings. This ensured full engagement with all aspects of the data. Initial thoughts and key words were noted from each interview, but no coding took place at this stage. For the expert and senior OT interviews, this process began whilst undertaking and/or reading the transcripts. For the patient interviews this began whilst undertaking the interviews and then transcribing the interviews.

Following initial familiarisation, any text that did not specifically relate to the value of home visits for patients after stroke was excluded from ongoing analysis. Data relating to the value of the home visit for the patient included; descriptions of how patients

benefit from the visit, data that reported the purpose of the home visit in relation to outcomes that were perceived to be of value to the patient, descriptions of how patients react and feel about home visits, and data that discussed or debated the value of the home visit. As the patient interviews were specifically designed in relation to the patients' experience and the value of the home visit, all of the data collected was considered, at the outset, to be of relevance to the research question, and therefore all of the data were included in the analysis.

Phase 2: Generating initial codes

At this stage all relevant data was coded into meaningful topics. Codes were described as data that appeared 'interesting' to the analyst, in response to the research question (Braun and Clarke, 2006). The author coded each interview, in response to the research question 'what are the participants' perceptions of the value of pre-discharge home visits after stroke?' Any data that was meaningful in answering the research question was given a code.

Taking an inductive approach, these initial codes were driven by the data as opposed to any pre-existing theories. Nothing was discounted unless it did not relate to the value of home visits after stroke.

As the expert and senior OT interviews were designed for use in other parts of the study, as previously explained, all of the expert and senior OT data was coded according to the general perceptions of home visit practice. The author then used these codes to focus specifically on the value the home visit has to offer to the patient. Each area of interest was given a code consisting of a key word or sentence. These were initially manually highlighted into different coloured codes. The Computer Assisted Qualitative Data Analysis package (CAQDA), NVivo 8, was used to assist with

the management and organisation of the data. NVivo is a well-recognised package to support the management of qualitative data (Gibson and Brown, 2009).

The interview transcripts were uploaded to the NVivo 8 software, which enabled codes to be stored together. This assisted in the data management and the identification of the same codes across the data sets. This was also achieved by pulling together the codes found from highlighting the text manually and writing down all codes found in one interview and then correlating them with codes found in other interviews. The use of both initial coding methods enabled the author to return to the original data sets; familiarising herself continually with the data.

The author regularly acknowledged and documented her own perceptions of the research topic and the findings whilst embarking on this stage, with the aim of acknowledging her own personal opinions and the potential influence this may have had on the analysis process.

Phase 3: Searching for themes

At this phase, the identification of meaningful patterns of codes, forming themes that answered the research question took place. Braun and Clarke (2006: 82) define a theme as *'something important about the data in relation to the research questions and represents some level of patterned response or meaning within the data set'*.

Each individual code was written down to enable a visual image of the developing patterns. These codes were then utilised to form a visual map to assist the author in identifying meaningful patterns of codes. The author used her reflexive log to consider the relationship between the different codes and, to identify if they represented the same or similar meanings. Those that did represent the same meanings were brought together to form a theme.

Nvivo 8 assisted in the management of this thematic analysis by storing the codes that formed the developing themes together, along with the quotations that described the themes. This process allowed quotations to be reviewed as a whole, and assisted in decisions about which best described the meaning of the themes.

This form of analysis did not seek to determine the themes from the most common response, as with a more realist approach, but to ensure that any data that was of relevance in identifying the perceived value of home visits after stroke was represented.

Phase 4: Reviewing themes

At this stage the developing themes were reviewed and refined, checking that no relevant data had been missed, and that the themes accurately answered the research question. This stage of analysis was twofold: firstly checking if the themes worked in relation to the coded extracts and, secondly, that the entire data set generated a thematic 'map' of the analysis (Braun and Clark, 2006).

It became evident that certain initial themes were either too diverse and could be separated into smaller themes, or that they did not have enough data to support them, and were either disregarded, or formed together with other themes.

This process required the author to return to the original research question: 'what are the participants' perceptions of the value of pre-discharge home visits after stroke?' in order to ensure that the findings were consistent with what the research had aimed to explore.

Initially, at this phase, all of the collated extracts from each of the themes stored in NVivo 8 were re-read in order to confirm that the developing themes reflected what was being said by the participants, and that they "*formed a coherent pattern*", (Braun and Clarke, 2006: 91), and to check that nothing of relevance had been missed.

Following this, the whole data set was re-read to check that the themes “*worked in relation to the data set*”, and to confirm that no additional codes had been missed (Braun and Clarke, 2006: 91).

Phase 5: Defining and naming themes

The themes were defined in response to the research question at this stage of analysis. The final analysis and the essence of what each theme meant, was recorded. This allowed for ongoing analysis and refinement of the themes. Final decisions about the themes and sub-themes were made. Each theme was defined and key quotations were selected to illustrate the meaning of the themes and the interpretations of the data. Braun and Clark (2006) advised it is important that the themes identify what is of interest about them, and why, in relation to the research question.

Phase 6: Producing the report

The final stage of analysis was to write a report of the research findings. The author aimed both to describe and explain their interpretations, and link their findings to the available evidence, in order to develop theory. Chapters four, five and six encompass the report of the analysis, where the themes are explained and discussed.

In order to provide the reader with a specific understanding of how the themes developed, an audit trail of the thematic analytical process, undertaken by the author on each of the participant groups’ interview data, is represented in appendices, I, J and K. This provides supplementary detail about the analytical processes used, and the development of the thematic analysis as put into practice (by the author).

Once analysis of each of the participant groups’ interview data had been undertaken, and the research findings had been written, the key findings, i.e. the themes from each of the three data sets, were compared to search for both similarities and differences in

perceptions about the value of home visits after stroke. This formed the basis for the discussion in chapter seven.

3.6. Consideration of rigour

To provide an accurate outcome of the research findings, address the research question and in turn provide evidence that is credible, the author addressed issues concerned with rigour throughout the design, data collection, analysis and report writing processes. These have been explained throughout this chapter, but the key considerations are now summarised.

As discussed previously, the aim of this study was not to measure objectively the value of home visits after stroke. It should, therefore, be borne in mind that qualitative research cannot depend on the same measures appropriate to quantitative research, whereby validity and reliability are measured (Hansen, 2006; Kelly, 2010).

Also, as previously described, the author aimed to reflect the trustworthiness of the research through transparency of the method and the research processes, using explanations of how she came to the conclusions she did. To achieve rigour, the strategies of thick description, whereby details of the context and participants were included, and an audit trail demonstrating how the author's thinking progressed were used (Ballinger, 2006). This allows the reader to evaluate the findings for themselves and consider whether the interpretations that were made were justified based on the evidence presented.

The initial design of the study was led by a group of researchers each with differing ontological positions. The approach to rigour was therefore influenced by a more realist position, whereby reliability and validity was aimed to be sought. Hence, initial decisions as to who was deemed an expert and an explanation of why, took place. This

enabled a purposive sample to be identified with the aim of 'accurately' answering the research question.

The author designed the topic guides with the support of the research team, and the initial themes were discussed and agreed upon at the different stages of analysis, with the aim of demonstrating 'reliability'. The author initially sought to consider her own position and influence on these processes and the influence of 'bias', again to ensure validity of the research findings. However, as the author began to focus her study on a specific aspect of the research, she was aware that her views were developing and that she had taken a 'subtle realist' view of the research process, and sought to ensure rigour through alternative methods compared with those a 'realist' would take, as described previously.

The author kept a reflexive log to document and report on the analysis process and how she reached her interpretations, in order both to reflect and allow for transparency of her interpretations. In doing so, she aimed to provide a transparent account of how she came to the interpretations she did, to enable the reader to determine if the outcomes could relate to populations similar to that of the participants included in this study. The decision to present the analysis procedure in this way is due to qualitative research often being criticised for the lack of explanation of how findings are developed and scrutiny over their rigour.

As stated by Silverman (2006: 237) the key consideration of research rigour is whether *"the researcher has demonstrated why we should believe them"* and whether the research problem has theoretical and or/practical significance. This study has attempted to demonstrate its theoretical and practical significance and, through its approach to the demonstration of research rigour, has tried to enable the reader to understand how the findings of the research have been reached.

3.7. Researcher reflections on data collection/creation

Qualitative researchers accept and value the central role of the researcher in construction of knowledge (Finlay, 2006). Considering the qualitative nature of this research, the author recognised the importance of considering the impact that they themselves had on the research, and therefore this section is a reflection on the data collection and creation process.

3.7.1. The author's professional background and role in the HOVIS study

The author was the research OT for the HOVIS study. Her primary role was to support the HOVIS team in the design and completion of a two part study; i) a qualitative investigation into perceptions of pre-discharge home visits after stroke (completed to support in the design of future quantitative research), ii) a feasibility RCT. As part of her research role the author was responsible for the recruitment of patients to the feasibility RCT, and the completion of the control and home visit interventions. Alongside this role the author completed her own qualitative piece of research investigating the value of pre-discharge home visits for patients following a stroke.

The author had 12 years of clinical experience as an OT at the point of completing this research, six of which had been spent specialising in stroke. The author had experience of completing numerous pre-discharge home visits prior to this study with patients who had had a stroke and also from working in a number of other clinical areas, including general medicine, trauma and orthopaedics and acquired brain injury. This experience was felt to put her in an ideal position to support in the design of both the HOVIS study and her own qualitative research study, as she had an understanding of the nature of the pre-discharge home visit intervention and could advise on data collection.

It must also be acknowledged that the author felt passionate about the role OTs play in supporting patients to return to functional independence, and held a positive view of the value of pre-discharge home visits after stroke. However, interestingly for her as a clinician, having completed the HOVIS control intervention (a hospital interview), she

found this gave her time with patients and relatives to focus on their concerns about discharge home, which she found to be of equal value to a pre-discharge home visit, for certain patient groups. This changed her perceptions and way of approaching patients' discharge. Hence, the author viewed both the hospital interview and pre-discharge home visit interventions to be of value to patients and/their relatives. This is important to note when investigating the value of home visits after stroke, as the author had experienced what she felt to be a suitable alternative to the home visit. This knowledge enabled her to be more questioning of the value of the home visit, than she may have been previously.

3.7.2. Reflection on interview process

Reflection on the difference between the author completing the interviews compared to someone else completing the interviews

The interviews were completed by four members of the HOVIS team, with the author completing all of the patient interviews (eight), four of the expert interviews and seven of the senior OT interviews (19 out of the total 34 interviews). The other interviews were completed by three members of the HOVIS team, each with differing academic and clinical backgrounds (one doctor/researcher, one qualitative researcher and one OT/research associate). The team did meet prior to this process, and the author lead two sessions on conducting interviews and thematic analysis with the aim of ensuring a consistent approach to data collection and analysis. A topic guide was also used to ensure a level of consistency throughout the data collection process. However, each of the interviewers brought their own experiences, views and perceptions to the interview process, which should be acknowledged.

Although the author felt her experience of home visits put her in an excellent position to understand the interviewees responses, on reflection her line of questioning may have been less exploratory, as she felt she already understood the meaning of what the participants were saying, as opposed to an interviewer who had no experience of home

visits who may have sought to verify. Interestingly, having listened to all of the interviews and transcribing some of them, the author found that the qualitative researcher who had no clinical experience of home visiting, took longer on average to complete the senior OT interviews (60minutes) compared to the author (41 minutes) and the other two interviewers (34 and 25 minutes). The qualitative social scientist researcher did state at the beginning of the interviews that she was not an OT and did not have any experience of pre-discharge home visits and asked the interviewees to feel free to explain and expand on their comments. This is something that the other interviewers did not do, most likely because they were clinicians and did have a prior understanding of home visits. However, interestingly, this was not the same for the expert interviews. In this instance a particularly short interview was undertaken by the qualitative researcher, and despite probing and clarification along with pauses to give the interviewer time to reflect, this interview remained short, as the responses were relatively short.

It must also be acknowledged that three of the interviewers were reasonably new to this type of research investigation, and therefore, a certain amount of growth and development in their interview technique took place from starting the interview process to its completion.

Face to face interviews versus telephone interviews

Along with different interviewers, there was also a variation in how the interviews were undertaken i.e. telephone and face to face. Again this will have influenced the information obtained. An advantage of face to face interviewing enables a rapport that puts the interviewee at ease, allowing them to feel comfortable to share their experiences in more detail. Telephone interviews do not allow the same level of non-verbal communication, which could potentially limit the depth of the information obtained. Whilst acknowledging the benefit of access to a wider audience (Creswell, 2012) and reduced cost, the preferred interview option tends to be a face to face as

opposed to telephone interviews (Hesse-Biber and Leavy, 2011), in the main due to the visual cues and typical interactions that take place during a face to face conversation, which can support the researcher interviewee rapport (Green and Thorogood, 2009). However, whilst putting forward the argument for the dominance of face to face interviewing, it has been acknowledged that there is limited research evidence to support this, and that further research is required to compare the two modes of interview (Norvik, 2008).

Essentially the decision to complete telephone interviews in this study was a pragmatic one that focused on gaining a wide range of expert and senior OT opinion, within the confines of the research funding that was available. To account for the lack of non-verbal interaction gained during face to face interviews, the researchers tried to ensure a rapport was built through their initial introduction and contact with the interviewees. The interviewers began with a question that was non-threatening; this can assist with overcoming the likely apprehension phase of the interview, stemming from the new context of the interviewer and interviewee relationship, which can feel strange (DiCicco-Bloom and Crabtree, 2006). When listening to the interview recordings it was evident that all of the interviewers attempted to build rapport with the interviewees, with clarification and active listening i.e. acknowledging comments with 'yes' and 'um' and clarifying their interpretations of what had been said.

The interview length

The length of the interviews did vary considerably both within and across each of the three data sets. The design of the interview incorporated open ended questions throughout, and time for the interviewers to probe and expand on the information provided, in order to obtain the depth and richness of the information about the research topic. All of the participants were exposed to the same level of questioning and for some, despite probing and the use of open ended questioning, the length of the interviews was shorter; this could have been influenced by the time the interviewee had available, their own agenda for the interviews and the person

undertaking the interview. It does have to be acknowledged that the shorter interviews yielded less depth and richness to the collection process.

The order of the interviews

The research was designed so that the expert data was collected first and this was then used to assist in the design of the senior OT interviews, which in turn was used to assist in the design of the patient interviews. Had the patient interviews been completed prior to the expert and senior OT interviews, the latter interviews would have included topics relating to patient views and the impact of a home visit, as perceived by patients, for example the length of home visits. The expert and senior OT interviews could have asked how the experts and senior OTs felt about the patient perspectives', giving them time to consider and reflect on the patient experience. In this research accomplished academics and/or clinicians were positioned as the experts in this field, however, questions could be raised as to whether the patients were indeed the experts as they were the central point of the question; what is the value of home visits to patients who have had a stroke?.

3.7.3. Influence of the author on the analysis and interpretation

The practice of pre-discharge home visits after stroke at the author's place of work (also where the HOVIS feasibility study took place) was routine prior to the HOVIS study starting and a large proportion of patients would receive a home visit prior to discharge, including those being discharged to care homes. The author, along with her colleagues, would primarily complete home visits to enable the best possible transition from hospital to returning home by minimising safety risks, enabling independence in ADL and handing over care to the appropriate community services. It was a usual part of OT practice to complete these visits and primarily it was the OTs decision, as to whether a home visit was felt necessary or not. However, it was the author's view that home visit decisions were often influenced by patients who were anxious about their return home or more often by their carers/family members.

The author's experiences were consistent with certain participants' experiences and therefore it is possible she added meaning to those participants' perceptions based on her own experiences, for example the value home visits were perceived to have in supporting patient's and carers to adjust to returning home, and supporting with the transition. The author was also aware of current restrictions on home visiting practice in terms of time and how many visits can be completed. Hence, she could position herself in the situation of patients' who found their home visit to be rushed. However, in the cases where participants' experiences differed from those of her own, the meanings attached were not based on her own pre-conceptions, and may have differed slightly, had she shared a similar experience.

It should also be noted that as an OT, the completion of these interviews was a learning experience for the author, that could impact on her own clinical practice, as she gained new knowledge that could influence her future practice. This level of clinical interest could have also impacted on the interview process, with the author being more questioning of practice that differed to her own.

The use of a reflexive diary enabled the author to consider her influence throughout the process, with the aim of determining different meanings to the analysis process, other than those that would have been based on her perceptions and views. This is reflected on in appendices I, J and K.

The following three chapters present the results of the thematic analysis undertaken on the interview data generated with the three participant groups. The audit trails (in appendices I, J and K) will enable the reader to have an understanding of how these results developed, adding further to the rigour of the research.

**Chapter Four: The value of pre-discharge occupational therapy
home visits for patients who have had stroke: Expert
perceptions and opinions**

4.1. Introduction

This chapter reports the expert participants' (from here on referred to as experts) perceptions of the value of pre-discharge home visits after stroke, following thematic analysis of the expert participant interviews. It outlines the expert sample before describing the research findings.

4.2. Expert participant sample

Seven experts in OT home visiting and/or stroke rehabilitation were approached and all responded by e-mail to confirm whether they could take part in the research. One expert approached declined to participate stating they did not feel that they had enough recent experience of home visits to still be considered an expert. Therefore, six experts were interviewed after providing informed consent, four of whom were OTs, one a doctor and one a physiotherapist, by background.

Three of the experts were practising clinicians and three were full time academics. Five of the experts had experience of undertaking stroke research, one that specifically related to pre-discharge home visits, and two had experience of undertaking home visit research with populations that were not stroke specific. Four of the experts worked in England, one in Scotland and one in Australia.

4.3. Interview procedures

The interviews took place at a time and location to suit the experts. Three were undertaken face-to-face, one over skype (video link) and two over the telephone. The duration of the interviews ranged from 15 minutes to 49 minutes, with a median of 32 minutes.

The experts were able to answer all of the questions, although expert three stated they did not feel they could describe the content of current home visiting practice due to not working in a clinical setting in recent years. However, expert three did feel able to discuss their perception of the purpose and value of current pre-discharge home visit practice. The experts provided narrative on a diverse range of experiences and perceptions on this topic.

4.4. The research findings

4.4.1. Overview

A thematic analysis was undertaken as described in chapter three, which inductively sought to identify the value of home visits after stroke as perceived by experts in the field.

The experts highlighted a number of reasons as to why the home visit was of value to patients who have had a stroke, including: identification of home adaptations and/or equipment needs, supporting patients in adjusting to life after stroke, addressing relationship issues, enabling those patients with cognitive impairment to become familiar with their environment, promoting independence and minimising safety issues on a patient's return home.

The findings indicate that the experts perceived that OT home visits enabled OTs to assess how a patient who has had a stroke would function within their own home environment, which for certain patients was perceived as a favourable assessment when compared to that of a hospital interview. The reasons for the home visit being a preferred option to a hospital assessment related to a number of different reasons, including a more accurate assessment of a patient's home environment and the patient's needs.

Although the experts were in agreement about the value a home visit brings to a patient's discharge, there was disagreement about the cost-effectiveness of these visits, with some perceiving they were expensive and should be kept to a minimum, and others perceiving that they were not costly when compared to other interventions, and could be of value in preventing hospital re-admissions and falls.

The findings suggest that there is a current trend towards completing home visits for the purpose of minimising risks to patients. However, this may not be for the value it has to offer to the patient, but to reduce fears that OTs have about patient safety. There was a concern by some of the experts that these visits should not be used routinely for risk management purposes and that cheaper alternative assessments could be used if this was the case. However, these alternatives were not reported to address the emotional and psychological aspects of returning home after stroke, which were also perceived to be of value to patients.

The need to use resources effectively strongly influenced experts' perceptions of the value of home visits after stroke, and which patients the experts perceived should receive a home visit. The patient's level of disability and whether or not they lived alone were also perceived to influence home visit decisions. Those patients who had moderate to severe levels of disability were perceived to benefit more than those at the extreme ends of the spectrum i.e. those patients with mild or extremely severe levels of disability. Patients who lived alone were also perceived to gain more value from having a home visit.

Four themes developed in response to the research question: what is the value of pre-discharge home visits for patients who have had a stroke. These themes were as follows:

1. Person, function and environment fit

2. Managing risk at the cost of promoting independence
3. Effective use of resources: Home visits of value to some patients more than others
4. Patient control

These will now be presented separately.

4.4.2. The Themes

4.4.2.1. Person, function and environment fit

The experts reported home visits were completed with the aim of assessing how the person, their functional abilities and their home environment could 'fit' to enable the patient to return home after having a stroke. When describing this 'fit' the experts described the impact these three factors had on each other and a patient's ability to cope on their return home after stroke. The experts explained that functional difficulties may not be identified if a home visit prior to discharge was not completed, as the visit identifies how a person's disability after stroke affects their performance within their own home environment and wider community:

"So it goes back to that OT process of really matching that person's performance skills, with the activity that they are doing at home, in the environment they are living in...So I think it's more a complex process than perhaps it's given credit for" (Expert 5)

The experts described assessments of function that they perceived OTs to use on a home visit: gaining access into the property, mobilising around their home, transferring, negotiating the stairs and completing kitchen tasks. The experts described how the home assessment differed from that of the hospital assessment as it provided a more accurate assessment of a patient's needs. The experts perceived that OTs focussed their assessment on the physical environment e.g. furniture heights, space

and access within the property, in order to determine whether the patient managed to perform ADL or whether home modifications were required:

“I think, you know, the majority of people with significant disability are going to require some sort of environmental adaptations and that needs to be planned in advance of somebody going home and therefore that’s the requirement for the home visit” (Expert 5)

“The purpose was to assess person environment fit really...and to assess if people were ready to deal with the home environment in terms of walking on carpet or managing obstacles that they didn’t face in hospital” (Expert 3)

The experts described how, in recent years, there has been a shift towards patients having to wait for home modifications on their return home, hence the home visit may predict problems, but not be able to resolve them in time for a patient’s discharge home.

“It’s more common now, that people would just have to manage say on the ground floor before their rails are put in and before things are set up at home. Whereas, you know, we used to be able to wait for people to have things installed but it’s taking so long now that often that doesn’t happen” (Expert 2)

Patients may have to manage in an environment that does not meet their specific needs, in the short-term, on their discharge from hospital. However, as stated by the experts, the home visit could identify what was required and a referral could then be made sooner rather than later for longer term home modifications that were required.

The experts explained that they perceived home visits were not always valued in terms of identifying the impact of the patient's social environment e.g. family, friends and social networks or the impact of non-physical impairments, such as cognitive impairment. The experts perceived these elements to be of key value during a home visit in order to address the potential non-physical difficulties which a patient can face on their return home:

"I think people underestimate the cognitive and psychosocial outcomes of stroke and often those are things that may be highlighted by a home visit. I think people traditionally think of home visits to be more assessing of people with severe physical disabilities. But actually problems come out to do with relationships and cognitive functions" (Expert 3)

Although the physical environment was perceived to be the main focus of an OTs assessment on a home visit, the experts also felt that a patient's personal circumstances, including the cognitive impact of stroke, and their social network, should be included in this assessment. This view falls in line with the World Health Organisation's international classification of functioning, disability and health (ICF) (WHO, 2001), where it is acknowledged that a person's functioning and disability happen in context, therefore the ICF being inclusive of environmental factors. Hence, the home visit was perceived by the experts as a way of more accurately exploring the impact of cognitive and emotional impairments on ADL performance at home, as it was context specific. Interestingly a concern was raised about the underestimation of these outcomes of stroke, and the impact that they can have on a patient's ability to return home. This may be because physical limitations post stroke tend to be obvious as they can be observed quite easily, however, psychological impacts of stroke can be less observable, particularly in the safe confines of a hospital ward, where patients tend to have a large proportion of activities completed for them. A potential difference between completing a home visit for someone who has had a stroke and other patient

populations, who do not experience psychological impairments i.e. cognition and mood related impairments, was evident.

Completing a home visit for the purpose of identifying how a patient will manage ADL within their home environment was consistent with OT theoretical frameworks and models of practice; specifically the 'Person-Environment Occupation Model,' proposed by Law et al. (1996). This model is based on the theory that a patient's occupational performance is maximised when the overlap of these three elements is optimised. The key variable for the patient during the home visit was that they were being assessed in their home environment, which was where they usually completed ADL, as opposed to being assessed in a hospital environment, which was less familiar to them and did not pose the same environmental factors as those at home. However, interestingly, there were mixed views amongst the experts about the ability of a home visit to provide a realistic picture of a patient's functional performance on their return home:

"They get observed in a very artificial situation for an hour and then the occupational therapist makes a judgment on the basis of that as to whether somebody's going to be able to manage, you know, safely or not. And I think that that is unrealistic" (Expert 1)

"I think it gives a realistic estimate of somebody's ability to cope in their own environment... it highlights any areas of risk that haven't been identified... and it also identifies future need" (Expert 5)

When asked about comparing the hospital to the home environment in terms of being 'realistic', expert five stated:

"Because the hospital provides a slightly more secure environment in many ways without any of the hazards of the home... The home environment can throw up a

huge amount of issues that just hadn't even been anticipated... Because it allows us to see the person as an individual rather than just another hospital product"

(Expert 5)

As each patient's home is different and throws up different problems, it was perceived that a patient's performance at home offers a more accurate reflection of how they will cope at home. However, for others, the home visit scenario was perceived to be contrived and not able to offer a true reflection of how a patient would perform on their return home. In part, this was perceived to be due to the short length of the visit, but there was also a concern that what a patient was expected to do in a short period of time was not a reflection of normality. These perspectives highlight conflict between what a home visit can offer ideally i.e. an accurate observation of ADL performance at home, and what is realistically perceived to happen by certain experts i.e. a short visit where patients are expected to perform numerous tasks under test conditions. With patient experiences also highlighting that the home visit experience can be anxiety provoking (Clarke and Dyer, 1998; Atwal et al., 2008b), occupational therapists must consider both the timing and content of home visits to ensure maximum potential benefit to patients.

The experts described how home visits currently focus on risk management, therefore the role OTs have in promoting independence and improving a patient's quality of life has become limited. This finding forms the second theme, which is now discussed.

4.4.2.2. Managing risk at the cost of promoting independence

The experts described how, in their experience, OTs used home visits as a method to observe potential risks a patient may face at home, with the aim of reducing hazards to the patient prior to them being discharged from hospital, in turn preventing the patient from coming to harm.

“I've used them both as an investigative measure and also as a safety and risk assessment for patients, so it's something that has been part of routine practice” (Expert 5)

Although this was accepted as a valid reason for completing a pre-discharge home visit, in some cases concerns were raised about home visits being completed purely to assess risk.

Two different reasons were provided for questioning the value of home visits in terms of risk management. As previously stated there was a perception that routine safety assessments at the home provide an unrealistic assessment of a patient's needs. There was also a perception that home visits should be focusing less on risk management, which could be assessed using alternative methods, and more on a patient's functional independence and quality of life on their return home. Hence, the focus on risk management reduced the potential value of enabling independence in ADL. The value of completing a home visit to improve a patient's functional independence and quality of life was therefore described as under emphasised and, for some, this was a frustration of today's home visiting practice.

“I think in reality they're done to minimise risk, and to feed into the discharge process, whereas theoretically they should be used as a long-term strategy to facilitate the person regaining their independence. I think they're two very different things” (Expert 6)

“Until not that long ago here, you know, we had an occupational therapist service which was actually a discharge service rather than actually providing anything really in the way of therapy. And we've got to switch that balance

around from simply doing the mechanics of getting people home, to actually providing some genuine therapy” (Expert 1)

The experts reported that OTs can find the management of risk difficult when assessing a patient’s ability to return home, which was a concern, as it was perceived to influence decisions about a patient’s discharge destination, an over-provision of unwanted equipment, and an increased number of unnecessary home visits being completed. The value of the visit was perceived to be more to alleviate OTs’ fears of risk, as opposed to enhancing the patient’s experience of returning home:

“There are, you know, a lot of OTs that I’ve worked with over the years who have been incredibly anxious and terribly cautious and, if they had their way, would keep people in hospital, you know, two or three times as long as probably is, you know, I would consider necessary” (Expert 1)

“I think people [OTs] tend to rush everything because they’re too scared of the risk elements, that they feel if it’s [equipment] not there they’re going to fall over or something’s going to happen, that they’re a bad OT or something” (Expert 6)

Previous research supports the view that home visit practice focused less on community re-integration/participation and more on patient safety (Clarke and Dyer, 1998; Nygard et al., 2004; Barras et al., 2010). In an Australian study, OTs readily differentiated between the core non-negotiable home visit criteria related to a safe transition from hospital to home and the ideal world criteria relating to a patients participation in their broader community (Barras et al., 2010). Bore (1994) also found that topics addressed on a home visit which were likely to impact on a patient’s quality of life, such as finances and social isolation, were more valuable to patients than OTs. This may reflect the OTs’ focus on safety at the point of discharge as opposed to the

regaining of independence after stroke. However, having the finances to support one's self, and not being socially isolated could, nevertheless, pose equal risks on a patient's quality of life and ability to manage at home following discharge from hospital.

In view of the increased risk of falls for patients who have had a stroke (Jørgensen et al., 2002) a focus on safety was understandable. Indeed Nyberg and Gustafson (1995), who investigated falls after stroke, reported that, due to the frequency of falls encountered after stroke, falls prevention should be included in stroke rehabilitation. Investigations into the effectiveness of home visits in preventing falls are however limited to small studies, which have not shown home visits to be more effective in preventing falls, when compared to normal hospital care (Pardessus, 2002). Further investigation into the effect home visits have in preventing falls after stroke is required in order to establish the value of home visits for this purpose.

An OT's ability to reason clinically and manage risks effectively forms part of their duty of care for patients when taking the necessary steps to ensure patient safety at home. What becomes a concern is when home visits are being completed to 'check' patient safety when there are limited clinical grounds to indicate the value of the home visit for the patient. As the literature indicates, the development of risk management and clinical reasoning skills is likely to be more limited for junior OTs when compared to more experienced therapists (Reich et al., 1998; Mitchell and Unsworth, 2005). Guidance from more experienced OTs will support in this process, but ultimately, clinical guidelines are required to support all therapists.

4.4.2.3. Effective use of resources: Home visits of value to some patients more than others?

The experts did not consider that home visits were required for all patients returning home after stroke. This was not necessarily due to a lack of value to the patient, but

was influenced by the desire to use resources effectively and therefore a perception that home visits should only be completed with patients who 'need' a visit.

"There seems to be less home visits because people are...they're costly and they're difficult to organise and they're time consuming and if people are only in hospital for such a short time... taking half a day out to do a home visit, it's quite a long time" (Expert 4)

Although the experts generally perceived home visits as expensive, they had differing opinions on the cost-effectiveness of pre-discharge home visits, with some believing that they were cost-effective and others feeling that they should be kept to a minimum due to their expense:

"They're extraordinarily expensive in terms of time and resource and I think we should be keeping them to the minimum really because we all have limited occupational therapy time" (Expert 1)

It's my own personal thing...that they do not cost a lot, compared to a lot of other interventions... if they then are reducing the hospital stay by even one or two nights... OT time isn't that expensive compared... to a lot of other interventions...that go on in hospital" (Expert 4)

The experts described characteristics of those patients whom they believed it would be of more value to complete a pre-discharge home visit with or whether alternative methods of assessment could be used. Reasoning provided as to when home visits were required was based on the level of a patient's disability (both physical and cognitive), the level of patient frailty and if they lived alone:

“Probably those are at the extreme ranges, those who are obviously coping quite well... It wouldn't be an effective use of resources to do a home visit... and those people with very severe complex problems that obviously mean that they wouldn't cope with the environment that you understand they live in...and in that situation an access visit is entirely appropriate. Because you know, the actual organising and effort involved in taking someone with very complex problems home is unnecessary” (Expert 5)

“Talking to them [OTs] is that they choose people they think are vulnerable. They choose people who are frailer. They choose people who might... have need for long term rehabilitation goals. So people who you know, who maybe are at risk of falling or at risk of neglect” (Expert 4)

*“I mean mostly the home visits are conducted here in ***(name of place) for people who have physical changes after their stroke so for example somebody's whose mobility is very different...to what they were like on admission. .. Also they've got, if there's some concerns around their organisational ability, they would probably be the key criteria” (Expert 2)*

For those patients where a home visit was not deemed essential, alternative, less costly, methods of home assessment were suggested. These were usually proposed when the experts were talking about the assessment of the home in relation to physical disability, as opposed to addressing the emotional and/or psychological impacts of a stroke. Alternative methods included access visits, using in-reach services to support the discharge planning process, relatives obtaining measurements and the use of technology such as cameras and video-recorders to record observations of the home:

“I think there's an awful lot of information that we could get about people's home environments from relatives, friends, people who can use a tape

measure... I think access visits is one option...I think that someone with a reasonable bit of common-sense can probably provide that sort of level of information. I think that there's, with modern technology in terms of video and digital cameras... getting family member just to take pictures of the flat, might provide enough information" (Expert 1)

"The other thing that I think might be something that is going to start happening is the in-reach where the services from the community are going to start coming more into the hospital... and so if then the person is discharged without a home visit that member of staff can go and visit them immediately...the next day, or the day after...and check them out and that I think then makes people think, right I'll be home twenty four hours but somebody will be coming to see me..., you might not need a home visit...in that situation" (Expert 4)

It was reflected that, in previous times, more than one home visit may have been completed as part of a graded discharge. This was particularly true for those patients with cognitive impairment, to assist them in coming to terms with life after stroke and supporting them to re-integrate into their community. This was seen as a positive part of a patient's rehabilitation as it allowed the patient to return home and feel ready and supported, following therapy, to overcome their difficulties. However, it was reflected that multiple home visits no longer take place, which was associated with the pressure on OTs' time:

"You need to take them [patients who have cognitive impairment] home two, three, four or five times to give people the benefit of the doubt, in the olden days an OT assistant would take them home every day...and that's the only way for them to remember what home's like and where things are and get them settled ready for discharge...whereas that doesn't happen anymore, they're not

resettled back in... but in the long run, I'm sure if they did that it would save them money" (Expert 6)

There was a perception that home visit practice has changed over the last 20 years, with fewer home visits being completed at present due to their perceived cost and the length of time they take. This is not to say that the experts did not perceive home visits to be of value to patients, but when making home visit decisions, in view of a lack of evidence and their perceived cost, there was a perception that they should be used judiciously and with those patients for whom it was believed to have the most value.

If the NHS does not use its resources effectively, money is wasted on interventions that do not make a difference to a patient's outcomes and could be better spent on evidenced based interventions. What is problematic with home visits is that there has been limited research into their actual cost effectiveness (Barras, 2005), or the value that they provide to patients who have had a stroke (Chibnall, 2011). This makes it difficult for clinicians to formulate evidenced based decisions about how to use the resources they have effectively.

Drummond et al. (2013) took steps to address this by reporting the cost of pre-discharge home visits in the HOVIS feasibility RCT. Perhaps not unsurprisingly the cost of a home visit when compared to a hospital interview was on average £133 more, with the mean cost of a home visit being £208 and the mean cost of a hospital interview being £75. However, more trial data is required to indicate the actual cost-effectiveness of this intervention.

What was of key interest from the expert findings was that when discussing the value of home visits for patients who have had a stroke, they were very much aware of the time and cost of these visits and this influenced their beliefs about who should receive a visit. Although the home visit was perceived to have a number of benefits to the

patient, the experts considered the necessity of a home visit and in doing so highlighted the characteristics of those patients for whom they felt the home visit would be of most value. Further investigation into the perceptions of those patients with the identified characteristics would provide the patient perspective about the perceived value of these visits.

4.4.2.4. Patient control

An area that the experts felt required closer attention was the value the home visit could offer patients in taking control over their rehabilitation and managing the impact of their stroke. It was perceived that the home visit could provide a patient with an insight into their difficulties on their return home and time to discuss this. The experts believed that giving patients, time to discuss their choices, and how they would cope at home, enabled them to take control over their future rehabilitation needs and, in doing so, helped them to manage their life after stroke. There was a belief that the home environment was the best place to have discussions about patient preferences:

“I think personally that it's a really good way of people getting time...to almost self-manage. The emphasis is more on them having the chance to see what they need to live at home...As opposed to twenty years ago it would have been us saying you need this to live at home...I think it's now more like, we're taking you, we'll put support in but we need, you know for you to, to think about the goals you want to do to get home and you know, you're going to do it and how you're going to self-manage yourself when you're at home” (Expert 4)

“I think there is potentially a role sometimes to take patients like that to their own homes to remind them what's there, to show them that actually the fact that they're disabled in hospital means that they're still disabled when they get home, and that can be quite a useful

educational thing for the patients themselves and perhaps give them greater insight and understanding about what choices they really have when it comes to planning for the future” (Expert 1)

“People who have got... a complex problem following a Stroke ... the facilitation of that discussion is life changing...even that discussion about how they'll cope...So I think the skill there is being able to have that conversation based around that skill that OTs have in understanding when somebody's capacity matches their environment” (Expert 5)

There was a perception that home visits should enable patients to make choices about what is important to them and their future needs. It was reported that by enabling patients to assist in the discharge planning process, they were facilitated to self-manage their life after stroke:

“People should be given more of a chance to plan their own discharge and their own transference into the community...Cos when they get into the community they have to self-manage almost the whole of their condition” (Expert 4)

“Well I think it enables them to make an informed decision which is what the home visit should enable them to do. So it's, it's enabling them to state their preferences” (Expert 6)

“And when you say preferences do you mean about what, what goals they want to achieve, how they want to function?” (Interviewer)

“Their goals, their options, their treatment options, what they want to work, absolutely, it's their preference, where they want it to take place even and I think home is the best place to discuss those things properly” (Expert 6)

“Okay...what do you think's different about home as opposed to discussing these things in a hospital environment?” (Interviewer)

“Well I think it goes back to the recent literature now around the meaning of home and I think it’s important to go back to that literature... I think what’s coming through is that unless you understand what’s driving that person to go home, then the goals are, then you have, it gives you an understanding of what their goals are...and we don’t, we ask them where’s your bed, where’s your chair...We don’t actually ask them what is it that is so important to you” (Expert 6)

The concern that patients were not being asked their preferences on a home visit is relevant to the wider political agenda, with the government striving to provide an NHS that offers informed choices about the services available to patients (Department of Health, 2006). OTs therefore need to be clear to their patients about when and why they wish to complete a home visit and include them in this process.

The term self-management was used by the experts when talking more generally about the discharge planning process and reflects a move towards therapists enabling patients to take control over the management of their condition. This has been highlighted in The National Stroke Strategy (Department of Health, 2007) with an emphasis on patients being more involved in decision making processes and the management and recovery after stroke.

With the financial burden stroke has on the NHS and the wider economy, the NHS can no longer continue to provide the service it once did, which is reflected in the reported change in home visiting practice. Patients may have once relied on therapists to take the lead in their rehabilitation but are now being encouraged to take more of an active role in managing their life after stroke. It was perceived that, in view of patients having to cope with the effects of their stroke in the long-term, therapists should be enabling patients to manage their condition at the discharge stage and it was believed that the home visit could be of value in achieving this.

Along with the positive effects of home visits, the experts articulated negative outcomes of OT home visits for patients in terms of patient anxieties. The main perceived reason as to why a home visit could cause patient anxiety was its being a 'test' situation and patients feeling under pressure as they believe the outcome of the visit could impact on their ability to return home. This links with a lack of patient control over their future and the patient deeming that they must 'pass' the home visit if they are to return home. This was of interest when considering whether a patient would choose to have a home visit, and also in terms of the information provided to patients prior to the home visit:

"Well I think people can actually find them quite distressing, particularly when they know they can't do certain things, and they know it's a test and they know the important decisions are going to be made" (Expert 6)

"As for the patients, I don't know. I think some of them found the home visit quite stressful...in that they were panicking that they weren't going to manage and...weren't going to cope" (Expert 4)

Expert 4 did however go on to state that in their experience patients have reflected that even a stressful home visit gives them time to adjust:

"...but I think then, in the month later, when they're actually at home I think they probably look back and well, you know, maybe only one or two people have said, that they've looked back and say you know...we had that time to get ready for it" (Expert 4).

The experts' perception that some patients experienced anxiety as a result of having a home visit is supported in the literature (Clarke and Dyer, 1998; Atwal et al., 2008b). This is of particular interest as home visits are generally considered as assisting patients

in the 'smooth' transition from hospital to home (Barras, 2005). Considering the debilitating impact a stroke can have, it could be argued that, although daunting, a home visit prepares the patient for the inevitable change in life on returning home after stroke.

However, therapists should aim to reduce any stress a home visit may cause. This could be achieved by enabling the patient to have a more active role and providing education about the process. Atwal et al. (2011) argues that good information exchange between the patient, OT, carer and other agencies can assist in reducing these anxieties for patients. Providing information prior to, during and after the visit, and involving the patient in what they wish to achieve based on their concerns, is likely to go some way to reducing anxieties about home visits after stroke.

4.4.3. Summary

The experts perceived that home visits enabled patients who have had a stroke to adjust to life after stroke and were a valuable part of a patient's rehabilitation. Home visits were perceived to provide a better insight into how a patient will perform ADL within their home environment and in turn prepared patients more effectively for their return home. However, how realistic this was during a 'short' visit home was questioned.

The main focus of current home visiting practice was perceived to be prevention of risks by resolving safety hazards where possible, for example, an injury through falling. However, differing opinions were expressed about the value of home visits for this purpose, and there was a concern about routinely completing home visits to assess and manage risks.

It was also perceived that not all patients required a home visit and, when considering the available resources, in terms of OT time and providing cost-effective services, the use of alternative less costly methods of assessment were described by the experts. However, these alternative methods did not address the value for the patient in terms of self-management and patient preferences, which were also identified as potential values to the patient when receiving a home visit.

Investigations in to the value of having a home visit, for each of the different purposes identified, i.e. risk management, independence in ADL, adjustment to life after stroke, improving a patient's transition home and quality of life should be measured in future home visit trials. This will result in research that investigates what was deemed of value by experts in this field and assist in developing guidelines to support OTs and patients in making home visit decisions.

It will also be important to identify if patients have similar or differing perceptions of the values highlighted by the experts. The influence of resource and patient choice can then be addressed in the context of an evidence based intervention.

**Chapter Five: The value of pre-discharge occupational therapy
home visits for patients who have had a stroke: occupational
therapists' perceptions and opinions**

5.1. Introduction

This chapter reports the perceptions of the senior OT participants (senior OTs) following thematic analysis of the interview data. The senior OT sample is outlined before description of the findings.

5.2. The senior OT Sample

Twenty senior OTs were selected from 75 volunteers in response to a request sent out by the COT SSNP, ensuring a combination of OTs from both rural and urban locations and a spread of hospital locations across the UK.

Informed consent was gained from the 20 selected participants, to take part in a semi-structured interview about home visits. All of the senior OTs were female and senior in their role as OTs. The majority were band 7 OTs (on the agenda for change pay scale) and worked in an acute hospital setting; two participants did not specify (85% n=17). The type of wards they worked on varied, covering acute units (20%, n=4), rehabilitation wards, some of which were mixed with non-stroke and stroke patients' rehabilitation (30% n=6), a community rehabilitation ward (5%, n=1), mixed acute/rehabilitation stroke (35% n=7). Two (10%) did not specify the type of unit that they worked on.

The units the OTs worked on had varying average patient lengths of stay, which tended to depend on whether they were an acute, or rehabilitation unit, but length of stay also varied across units of the same nature. The OTs were asked to report on the average number of patients on their caseload and this varied from three to 19, with one OT stating she did not hold a caseload as her role was managerial. Please refer to table one for further information about the senior OTs who were interviewed. This is presented in such a way as to not identify the participants

Table 1: Senior OT characteristics

NHS Band Level	Type of Stroke Unit	Number of Patients on OT caseload	Number of OTs working on unit(n=)
Band 6	Acute	6 -10	1
Band 6	Rehabilitation	≤ 5	1
Band 6	Rehabilitation	6 - 10	2
Band 6	Mixed**	11 - 15	1
Band 7*	Hyper acute	6 - 10	2
Band 7*	Rehabilitation	6 - 10	2
Band 7*	Mixed**	≤ 5	1
Band 7*	Mixed**	6 - 10	4
Band 7*	Mixed**	≥ 16	1
Band 7*	Not specified	11 - 15	1
Band 7*	Not specified	Not given	1
Not given	Rehabilitation	11 - 15	1
Not given	Acute	≥ 16	1
Not given	Rehabilitation	11 - 15	1
			Total:20

*Band 7 or higher

** Refers to a combined unit with both acute and rehabilitation beds

5.3. Interview procedures

All of the interviews were completed over the telephone at a suitable time for the senior OTs. The length of the interviews ranged from 17 minutes to 67 minutes with a mean time of 39 minutes. All of the senior OTs were able to answer the questions, and the data obtained provided narrative of a breadth of experience and knowledge about home visit practice after stroke. One of the senior OTs, working in an acute setting, reported during her interview that they had limited recent experience of home visits after stroke, because of the limited number of home visits being completed in their place of work currently.

5.4. The research findings

5.4.1. Overview

As described in chapter three, thematic analysis (Braun and Clarke, 2006) was used to identify senior OTs' perceptions of the value of home visits for patients who have had a stroke.

The findings indicate that there was a number of potential different ways in which a home visit was of value for a person who has had a stroke, but that these may differ depending on a patient's wishes and the OT's preferences. However, the essence of the value of a home visit was its bespoke nature and it was argued that this was a unique intervention that could not be replicated in hospital. Home visits were therefore perceived to offer a more patient centred approach to practice.

This study suggests that a home visit enabled patients to overcome functional difficulties, which they may have on their return home after stroke. The different approaches that OTs took to overcoming functional problems that were identified on home visits are discussed.

The findings highlight the differing opinions senior OTs had about using a home visit for the provision of equipment. Factors that may reduce the value of a home visit were also identified.

5.4.2. The Themes

The following themes represent the key findings of the senior OTs' perceptions about the value of home visits after stroke:

1. A bespoke intervention:
 - Overcoming functional difficulties
 - Time to adjust to life after stroke

- Preventing harm
2. The impact of the timing of the home visit
 3. Instances that may inhibit the value of a home visit

These themes will now be presented separately.

5.4.2.1. A Bespoke Intervention

Observing a patient perform functional tasks within their home was reported to provide a bespoke assessment of a patient's needs on discharge from hospital. This was due to the belief that home visits enabled a more comprehensive assessment of an individual's specific social needs. Therefore the unique value of a home visit comes from tailoring the visit to the individual contextual needs of the patient.

It was reported that only in a patient's home environment could a 'true' picture of their needs be identified, as this highlights the hazards that they will face and provides context to their performance. The importance of the patient experiencing what it is like to return home, and the OT being able to observe and support in this process was perceived to offer a more accurate assessment of how a patient will manage on their return home:

"Well everybody is individual and everybody has their own way of living,... it's to see how they manage in their culture, how they live, and just to see if they can actually still do that with a little bit of support or...a piece of equipment or if we can work towards that and how we can get them back to that normal functional level" (Senior OT 13)

"No matter how hard somebody describes a house, it's not the same as seeing it and the kind of things that an OT might pick up that family might not even consider a problem. For example a door opening into a room for a patient with a right sided neglect [of space] every time they go in to that room they're going to

walk into the door. For a family member that might not strike them as, a potential hazard, so I think the use of photos and the use of furniture height forms do help, but I think patients with significant change in function, you probably, you need an OT to, to have a look and see” (Senior OT 1)

Contrary to the experts’ concerns about patient anxieties on a home visit, the senior OTs reported positive experiences of how patients react to their home environment, with patients being perceived to be more comfortable and in control when at home. This again was believed to enhance the accuracy of predicting how a patient would manage on their return home:

“I think patients when they’re trying to perform within the hospital setting it can be quite, can perform quite differently than when they’re in their own environment whether it’s just the unfamiliarity of the situation and being in hospital, and also the feeling that people are being tested or assessed, whereas in the home environment you’re actually on somebody else’s turf in their own home so they can often feel more comfortable and be a bit more natural about how they, they sort of feed back to you really, you can actually learn a lot from informal observation” (Senior OT 6)

The bespoke nature of this assessment in targeting an individual’s unique needs was identified to be of value, by enabling the patient to overcome functional difficulties/ adjust to life after stroke, and preventing the patient from coming to harm.

5.4.2.2. Overcoming functional difficulties

Due to the unique nature of a patient’s home and the effects of their stroke, the home visit was perceived to enable a bespoke intervention that addresses’ their specific functional problems. The senior OTs reported three ways in which functional difficulties could be overcome, through completing a home visit: i) Modifying the home

environment, ii) enabling functional recovery and iii) identification of support required. Each of these was reported to be better achieved as a result of a home visit.

Modifying the home environment

The senior OTs reported that a home visit can assist patients by identifying modifications that were required to their home that support them in compensating for functional difficulties. The senior OTs described that a change in a patient's physical function and mobility may mean that they require a wheelchair, walking aid or certain piece of equipment to accommodate their needs. The home visit was reported to identify how patients would manage at home with the new piece of equipment/mobility aid and if any further alterations were required to the home environment to enhance function.

Modifications to the home environment were identified as a common outcome of a home visit for a patient who has had a stroke. The use of equipment was reported both to enable function and improve a patient's safety whilst completing functional tasks. There was often a focus on the patient's short term needs, but descriptions of how the home visit could highlight a patient's longer term needs, and referrals on to other agencies to address home adaptations, were also discussed:

"So that we can look at what, what needs they might have for equipment, how things might work with regards to care, whether the environment needs to be altered in order for them to function at their optimum level" (Senior OT 5)

"I would do a home visit for somebody who had a big change in mobility and there was concern about how their frame or wheelchair or whatever would fit in the home environment and if I've ordered any equipment for them, then I'd want to make sure they can use that equipment" (Senior OT 20)

“So looking at his environment so I could when referring for a DFG [Disabled Facilities Grant] to say this is how his kitchen is looking at the moment...So it is added information that could go into his ongoing needs” (Senior OT 15)

Whilst home adaptations/modifications and the use of equipment were believed to be important reasons for completing a home visit, the value of focusing on the provision of equipment was also criticised. There was a perception that the home visit should be more than an exercise in ‘measuring’ furniture heights and providing pieces of equipment, which was perceived by some senior OTs to diminish the value the home visit had to offer:

“It’s about the holistic approach that an OT would look at so far as the person’s cognitive abilities within the home and their insight, not just how they get from A to B, you know I think sometimes people perceive the home visit as just issuing the equipment but if that’s all the case... there would be no need for a home visit in that case. Home visits are indicated because it’s something over and above just issuing a few pieces of equipment” (Senior OT 16)

“If you do OT in a very procedural, very simplistic way then the solution is to offer those plastic bits of equipment and then wonder why people don't use them. So I think generally in home visits and the whole kind of stuff around... gathering information about the patient and their home would be to get that information very clear in your head (Senior OT 3)

Senior OT 3 described how taking a ‘routine’ approach to home visits can lose the focus on occupation:

“We’ve lost that focus of the importance of occupational identity, the importance of occupation and how we can show we add value to the patient’s journey” (Senior OT 3)

It was emphasised by some of the senior OTs that equipment provision should not be the primary focus of the home visit. Interestingly there was a concern expressed about the OT's role becoming procedural and routine, as opposed to meeting the individual needs of the patient. However, a large proportion of patients who have received in-patient hospital based rehabilitation after stroke are likely to have physical problems and require certain pieces of equipment to support them on their return home, which was also reflected in the senior OT responses. Clarke and Gladman (1995) reported that the primary recommendation for completion of a home visit after stroke was provision of equipment, indicating that it is a common reason for completion of a home visit after stroke.

Interestingly, it was those OTs who felt the need to defend their practice, due to ongoing pressures to reduce the numbers of home visits, who questioned the value of 'simply' providing equipment. These differing opinions may come down to individual preference, but also reflect the potential pressure OTs experience when discharge planning to take a compensatory approach in providing equipment, when they would prefer to take a more restorative approach to enabling functional recovery and independence. The OTs also highlighted the need to address difficulties patients' face as a result of cognitive impairment, which for some was going 'above and beyond' issuing equipment. As with the expert findings, a potential oversight of what the home visit can offer, in terms of addressing psychological issues, was raised by the senior OTs, and should be taken into consideration when evaluating the value of these visits for patients. It is of interest that these opinions tended to be expressed by OTs having to defend home visiting practice, which further reflects the general perception that home visits tend to be completed for equipment provision as a result of physical disability.

Functional recovery

The home visit was perceived to facilitate patients' ongoing functional recovery by enabling them to practise functional tasks in their home environment as part of their rehabilitation. There was a perception that the home visit provides patients with the most appropriate environment to practise tasks, as it puts their functional difficulties into the context of what they will face on their return home. The senior OTs who criticised the 'routine nature' of equipment provision, argued OTs could offer more to their patients if they focused on what individual patients want to achieve in terms of their functional recovery.

Descriptions of how patients with physical and/or cognitive impairment benefited from being in their own home environment, and learning new skills, or practising skills that had been learnt in the hospital, to further their recovery were provided:

"Obviously, you'd have people who have very physical needs so it would be things like ensuring they've got access to the house, they can manage their transfers... However, we will also do home visits for people who have cognitive deficits or perceptual deficits. If I give an example, some cognitive deficits then we may do a different type of home visit ...We might take them down to local shops to see that they can orientate their way down to the local shops, they would manage money, they are able to plan and problem solve through the task, and get them to make a main meal within their own home. So home visits can be very different depending on the patient's needs" (Senior OT 14)

"Going over the technique, because we do quite a lot of the therapy but when the wife is not present it's good that you go over the correct technique and she can reinforce that in the home" (Senior OT 16)

Interestingly senior OT five stated that she enjoyed home visits that focus more on 'treatment' as opposed to setting up the environment:

"It was a very positive visit and it was really useful as a treatment tool and, and it's those sort of visits that I like best really, when it's not just about setting up the environment; it's about really helping that person to improve"

Observing the patient performing activities at home was also seen as a way of assisting on-going rehabilitation within hospital as the home set up could then be replicated in hospital, making a patient's rehabilitation programme more personalised. The measurement of furniture heights and space at home was therefore felt to be useful information to obtain to enable appropriate practice within the hospital. This contradicted certain senior OT opinions as previously explained:

"It can enhance people's rehab on the ward because you know what their home environment's like, you know what the challenges are going to be at home and you can maybe replicate that a little bit better in the ward environment, particularly with regard to furniture heights or locations of objects" (Senior OT 5)

Examples were given where more than one home visit was completed to support a graded rehabilitation and discharge planning process. The initial home visit determined those aspects of rehabilitation a patient needed to focus on, to enable them to manage when at home and further home visits focused on the patient practising these skills within their home environment. As with the experts there was a perception that in-patient stroke rehabilitation had changed over recent years, reducing the ability to complete more than one home visit and potentially resulting in less focus on rehabilitation and functional recovery. Completing a home visit that focused on treatment and practising functional tasks was described as a luxury:

“Sometimes I think the demand on the service and cost, and the strain on the NHS means that we don’t have the luxury of doing, sometimes doing visits that would actually benefit the person, in times past I was able to do ... especially for cognitive problems I might have done three or four visits and I might have graded that...It enabled them to practice and work things through, which in cognitive rehab you need that ability to do and I think in this present climate there isn’t that luxury and I think especially people with cognitive problems don’t necessarily get the rehab that they need and the planned discharge that they need” (Senior OT 14)

“I do think there’s massive therapeutic benefits to being at home and it would be great if we could do more visits that weren’t just about discharge, that were about the patient journey, about treatment, about practicing things in their normal environment. But because, like I said earlier, because of the time they take and the fact that they’re fairly resource draining, we, we do have this sort of unwritten one each rule” (Senior OT 5)

Functional recovery was described by the OTs as specific to the patient, but complex as it incorporates the effects of the stroke and a patient’s own personal goals. These elements of recovery were seen to be influenced by the environment where functional tasks were performed. Hence the belief in the importance of observing and practising tasks in the patient’s home environment, particularly for patients with cognitive impairment.

However, pressures to discharge patients sooner were reported to influence the focus of the home visit and how many visits were being completed. For some, a resulting change in practice had occurred and it was apparent that the home visit focused less on recovery and more on discharge planning and compensatory methods of coping.

Interestingly, certain senior OTs, who were being asked to justify the need for home visits, described the focus of a patient's recovery after stroke as being of paramount importance on the home visit, as opposed to the provision of equipment. It would seem that, although patient safety takes priority on a home visit, what the home visit is able to offer in terms of recovery is perceived to be of equal value by the senior OTs. What is unknown is the cost-effectiveness of completing home visits and, whilst budgets continue to be cut, it is unlikely that OTs will have the 'luxury' of completing one home visit and even more unlikely, a number of visits prior to discharge. This is despite the perception that this is of major value to the patient's transition and ability to return and cope at home.

Identification of support required

The senior OTs described how the home visit assisted in identifying the support a patient required at home to enable them to complete ADL. This included support from social care and primary care agencies, including community rehabilitation. The senior OTs described how, for certain patients, it was difficult to identify their exact needs in hospital, as they can perform differently at home and, therefore, completing a home visit gave a more comprehensive insight of the support they would need on their return home:

"She's got Glaucoma, so she's got reduced vision anyway, in her right eye and now she's got quite a significant left inattention. So she's needing someone with her to walk around for directions, more than anything, to make sure that she doesn't get lost. But she's someone I'd want to see in her own environment because obviously having a, having a pre-existing knowledge of the environment helps you with your orientation to it. So I, I'd want to know if she still needed that one person to help her get around at home or if, actually, she can, she could do that independently because it's a familiar environment to her" (Senior OT 5)

“Sometimes there’s a social worker to meet on the home assessment as well...Yes we do invite them especially if there are quite significant social problems, you may end up having a mini case conference while you’re at the property at the end of the visit just to actually summarise and conclude as to what kind of support is going to be needed” (Senior OT 6)

The benefit of the patient meeting their community team was also reported, further preparing the patient for their discharge home:

“Yes, it is quite helpful because they can then get an idea of what the patient’s abilities are and what from their point of view will be needed but also the patient can get to meet them as well, they know who they are and who’s going to be coming into their homes and things” (Senior OT 10)

Again there was a perception that ‘seeing’ how a patient managed within their own home provided a better and more realistic assessment of how they would cope on their return home. In turn the OTs reported that they identified and set the patient up with an ongoing package of care and rehabilitation that met their needs and enabled them to overcome their functional difficulties.

Patterson and Mulley (2001) reported an increase in the number of pre-discharge home visits being completed. This was potentially due to reforms in health and social care assessment procedures, resulting in social workers requesting home visits be completed in order to assess the support a patient required at home. A decade on, there appears to be a reduction in the number of pre-discharge home visits being completed (Drummond et al., 2012). This is unlikely to be because the perceived value of assessing the level of support required has reduced, but more likely to be linked to whether it is deemed an essential part of the discharge planning process or whether alternative ways of determining this information could be identified. However, the

senior OTs again argued that an assessment in a patient's home environment provided a better understanding of their needs and in turn this enabled a more appropriate package of care to be set up. This has the potential equal benefit of saving resources especially if a patient goes on to perform better within their home environment, as was suggested by certain senior OTs, and requires less support than anticipated by the hospital.

This sub-theme presents the senior OTs' perceptions of three ways in which a patient who has a home visit after stroke can be assisted to overcome their functional difficulties: modifying the home environment, identifying support required and enabling functional recovery. These were all believed to be better achieved in a patient's home environment, as opposed to the hospital environment, because of the bespoke nature of this assessment in identifying an individual patient's needs.

5.4.2.3. Time to adjust to life after stroke

The second sub-theme that formed part of the 'Bespoke intervention' theme was 'Time to adjust to life after stroke'. The home visit was described as a way of providing the patient and their family with time to adjust to their life after stroke. It was perceived that in turn this enabled patients and their families/carers to feel ready for the patient to return home by giving them time to understand what it would mean and feel like to return home.

There was a perception that the meaning of the home to the patient can change after stroke, and therefore the visit supported the patient in adjusting to this change. Hence, home visits being described as part of a psychological and emotional process that the patient goes through in preparation for returning home:

"Especially for people who've had a stroke it's an essential step in their psychological recovery, coming to terms with what's happened to them and the

fact that life's going to be very different at home to how it was before... so it's kind of helping them back through that door and supporting them and allowing them to adjust and that is essential" (Senior OT 12)

"And I think it's really just you know assists in them coming to terms and sort of adjusting to living with a disability if they're left with disability from their stroke as well it allows you to try and overcome it as best you can" (Senior OT 17)

"... those who are very much not at their baseline level and they have functional difficulties...and coming back to the house can be very emotional but it's a good platform for those emotions to happen I think because I am there to, you know, to deal with any concerns or issues that the patients may have" (Senior OT 16)

Contradictory to the experts' reports, the home visit was reported to alleviate a patient's anxieties about returning home and have a positive effect on improving a patient's confidence in their functional performance and safety by experiencing how it feels to return home. This was seen to improve patients' confidence when returning home:

"I think the ones that go well, so the ones that if potentially a patient has been quite anxious and apprehensive and they do the home visit and then they're reassured and more confident in themselves, and you can sometimes see a difference in them when they come back to the ward,... it has a positive effect on their mood" (Senior OT 18)

"I think a lot of people have a lot of anxieties about returning home after stroke so I think it's a good opportunity to sort of allay a lot of those fears and to actually address them within the setting" (Senior OT 6)

However, some patients were reported to feel low after a home visit, although this was not perceived to distract from the value the visit has in supporting a patient to realise and adjust to their problems:

“The patient might feel quite low after having done a home visit because reality has hit home...so it might be perceived as quite a negative experience, but then again you could argue that maybe that’s a good thing... It may seem initially negative, but maybe actually in the long run it might be quite a good thing”
(Senior OT 14)

As a result of the adjustment a patient goes through, and the improvement in their confidence, it was perceived that the home visit has a large impact on a patient’s and their families’ ability to accept how a patient will manage on their return home. For some patients, it was believed that the only way for them to acknowledge their disability, was to educate them within their home environment prior to discharge:

“So it did highlight to his wife and himself that going home he would need to take his time and try and problem solve. So as I said she would practise with him in small spaces. So it was a nice supportive, but without that visit he would have got home, become more frustrated, his wife wouldn’t have clearly understood what the problems were” (Senior OT 15)

Enabling patients to discuss their concerns, and to be with their family, were seen as important outcomes of the home visit. As with the expert findings, the discussion that takes place on a home visit was believed to be significant in planning a patient’s discharge:

“So we’re doing a visit today with family or friends just to kind of give the patient and his wife some time together in their own environment because they haven’t seen each other since he was admitted, you know three weeks ago or

something. And to then have that opportunity to discuss with the friends who know them very well, and you know everyone's consented to this, to kind of make plans for what's going to happen next" (Senior OT 3)

"And it supports the patient as well, because then you can have that dialogue with the patient, 'look I know you're going back to live with your wife but she's made it clear that she wants other services in to do your personal care', and take them through that. Because then it's a trauma for them, if they're in their 60s, 70s, 80s and have got some care agency coming in, that person might only be in their 20s...So you've got to talk them through that aspect as well, 'that they will be coming in and they will help you get washed and dressed, as the nurses are doing on the ward', that is a major adjustment to somebody's life" (Senior OT 15)

The previous sub-theme, 'overcoming functional difficulties' highlighted the value of completing more than one visit prior to discharge and this was also perceived to be of value in supporting a patient and their family to adjust to life after stroke. It was reported that the home visit could lead to extended periods of time at home prior to their discharge from hospital. This was believed to assist patients and their relatives to come to terms with the difficulties that they may have, which they can then discuss with their therapist on their return to hospital. This process was described as supporting the patient in managing their own condition and problems they may face on their return home.

Interestingly, as with the experts, the senior OTs described how the adjustment period, that home visits enable, can support the patients along with their families to manage their disability and life after stroke in the longer term. It would seem that the time given on a home visit for this adjustment was deemed as a key value of this intervention. However, with the pressure to discharge patients sooner, it was reported

that less extended periods at home now take place, as because, when patients were deemed to be safe to remain at home, they were discharged from hospital:

“Just recently we’ve done one with somebody who’s got total aphasia and dyspraxia and is starting to walk with her husband and it’s really obvious that the husband has got a massive adjustment to do, that’s why we had to do two visits...they don’t understand the implications it has, you think you’ve explained it and then you come away and you realise that they really don’t have a clue, so those people need a lot of support... That’s the other thing that we get them to do if it’s a long term disability, take people home themselves at weekends...because then they have that responsibility, they can then come back on a Monday and say well actually we didn’t realise da da and that; what we can then work on and try and solve” (Senior OT 9)

“I guess it’s thinking about leaving a patient there for that, you know, longer period of time...so for a couple of hours trial... I’ve done that as a ‘ok we’ll do a home visit, you can go home for the weekend, come back on Monday...and tell us how you got on...we’ll do some more rehab’...where I work now they use it as a ‘Right, you’re ready for discharge...we’ll do a 48 hour trial and we expect you not to come back’... it seems to me a bit of a not a waste, it’s not the right word, but a missed opportunity, I guess... of encouraging people to take control over their rehab...and get out and adapt to their new lifestyle...you know I see that as an essential part of rehab really” (Senior OT 4)

“And I think it really just you know assists in the coming to terms and sort of adjusting to living with a disability if they’re left with disability from their stroke as well it allows you to try and overcome it as best you can” (Senior OT 17)

From what is known in the literature about stroke survivors' perceptions of recovering from a stroke, they experience a sense of loss both in their roles and identity and can struggle to adapt to their disability, requiring considerable work to rebuild their lives (Pound et al., 1998; Casey et al., 2008; Lamb et al., 2008). Therefore, if home visits enable a patient to come to terms with the difficulties they'll encounter at home, they are likely to be going some way to addressing the difficulties most encountered by patients following their return home. However, some may question the impact a short home visit can have on the long-term adjustment process. Hence, further work is required to ascertain the potential longer term effects a home visit may have.

It would seem that the value a home visit had in supporting a patient and their family to adjust was seen as a luxury, where overcoming functional difficulties and patient safety takes priority. However, the ability of the visit to enable patients to accept and manage their problems, which was also highlighted in the expert findings, needs to be considered. This could potentially be a cost-effective outcome, with patients being enabled to problem solve and cope with the difficulties they face on their return home. It may also prevent hospital readmissions as a result of a 'failed' discharge.

In view that the home visit was perceived to be of such value in enabling patients to adjust to their lives after stroke, this requires further investigation, both quantitatively in terms of patient outcomes, and qualitatively in order to gain the patient perspective about what constitutes adjustment and whether a home visit can have an impact on this.

5.4.2.4. Preventing harm

A predominant reason given for completing a home visit was to facilitate a safe discharge home. It was believed that the home visit could prevent falls and hospital readmissions by ensuring the patient had been discharged back into the community 'safely'.

Modifications to the home environment and the use of equipment were again seen to be part of this process. It was also believed the home visit had the capacity to facilitate a discharge home for patients who had previously been deemed unsafe in hospital. The home environment was seen as a better means of identifying these issues, as patients' homes were unique and posed different problems for different patients:

"I think they're a real valuable tool that we have as OTs to use and I think they are useful for us and the patient and the MDT and the patients family ...try and minimise risks for people and hopefully prevent readmission to hospital and allow it to highlight any risks and things and how they may be overcome" (Senior OT 17)

"To ensure that the patient is going to be safe in their own environment and to make sure that yeah all the equipment is there that they need" (Senior OT 8)

"For the stroke patients the big one is mobility and looking at managing risks of falls at home, so I'd be looking from an OT point of view at, access, floor covering sort of circulation space in and around the home. Looking at, I mean if they are at the point where they are able to do some kitchen tasks, looking at how the layout of the home can improve their safety when they are doing those things" (Senior OT 19)

"What type of things might you do to help manage those problems?" (Interviewer)

"Well for example if it is in the kitchen, looking at equipment provision, maybe looking at the set-up of the kitchen is there any way we can change maybe the location of certain items to make things a little easier for the patient?, to keep them a little bit safer, bringing things down to a more appropriate level for them" (Senior OT 19)

There were cases reported in hospital where it was thought a patient may not manage safely at home and, therefore, a home visit was undertaken to give that person the opportunity to demonstrate their abilities at home. This enabled the OT to consider the risks and decide if a discharge home was feasible:

“He is still there [at home], maybe a year and a half two years down the line so I am glad he’s still there and obviously managing. But yes, had the information just been received this is where he lived and how he lived, it probably would have just been deemed that it [the home] wasn’t suitable” (Senior OT 16)

The perception that the discharge destination would have been different if the home visit had not been completed emphasised the importance placed on the role a home visit can play in a patient’s future. The home visit was also perceived to identify those patients who would not be safe at home and therefore who were not ready to be discharged from the hospital environment. The senior OTs described situations where they had experienced a different set up at home to that reported by a patient or their relative during discussions in hospital, again reflecting the belief that the home visit offers a better assessment:

“You can only really identify that when they are in their home because everybody’s home is so different. Someone can say to you oh it’s level, it’s fine, I can get on and off there’s no problem, and I can get on and off my bed no problem and I just never forget some of the things I’ve seen out there in the community that it’s unreal. So most of the time I would do a home visit unless there was, you know unless I was a hundred percent sure that was fine. But the value of a home visit is much greater” (Senior OT 13)

Senior OT 15 reflects how she could have sent someone home ‘unsafely’ had she not completed a home visit which highlighted difficulties:

“We went out into like an out-house passageway area, and there was gas canisters all out there, and she proceeded to try and move them around and turn them on and all sorts of odd behaviour when we got her home, yet on the ward because she got used to the routine post stroke... she’d actually sort of built her skills up in that very protective environment that wasn’t particularly challenging to her...but once we put her in her home environment she’d actually lost the memories for a lot of what was going on...So she couldn’t go home ...But I was stunned afterwards, and I thought I could have sent that lady home to such a vulnerable situation and not been aware” (Senior OT 15)

There was a belief that, in certain cases, if a home visit had not been completed, a patient may have been at risk and memorable examples were provided where the senior OTs described patients who could have been discharged and not coped safely. The perception that home visits can prevent patients from coming to harm is one which is discussed in the literature (Nygard et al., 2004; Atwal et al., 2008a; Drummond et al., 2012).

Brandis (1998) in her research of an OT service for early supported discharge (ESD) after stroke, reported that the ESD OTs had felt some of the patients’ homes should have been visited prior to discharge and, in one case, a patient was readmitted to hospital as the home was found to be too hazardous. Hale (2000) also gives accounts from OTs who perceived that a home visit would have prevented hospital readmission.

It is cases like these that OTs are likely to remember and which, in turn, could shape their future decisions as to whether a home visit is required or not. OTs have a professional and legal responsibility to their patients and experiencing an instance whereby a patient may have been put at risk, due to a lack of perceived action on the OTs part, emerged as an influence on the OTs clinical reasoning and home visiting practice. Conversely the impact of not completing a home visit, and the patient being

deemed 'unsafe' and being discharged to alternative accommodation, has a considerable impact on a patient's quality of life and control of their future, which poses equal risks. This finding reflects the importance the home visit is perceived to have in determining a patient's discharge destination.

The home visit was believed to offer a unique insight into how patients respond to, and perform in, their home environment. The home visit was perceived to be a bespoke assessment, offering a patient centred approach to the discharge planning process by supporting patients to be equipped to overcome their disabilities as a result of their stroke, on their return home. Three main ways in which a home visit achieved this were reported; overcoming functional problems, allowing time to adjust to life after stroke, and preventing patient from coming to harm.

5.4.3. The timing of the home visit

The overall purpose of the home visit, whether it was to overcome functional difficulties, to address safety issues or to adjust to life after stroke, was reported to influence the timing of the visit. This finding is of interest as the timing of the home visit seemed to impact on the perceived value of the visit.

Home visits that were undertaken to identify patient goals focusing on recovery and what a patient needed to achieve in order to return home, were generally reported to be completed earlier in a patient's rehabilitation. Home visits that were completed for the purposes of discharge planning and identification of home modifications were generally perceived to be better completed in the run-up to a patient being discharged, to identify a patient's needs on their return home.

In terms of a patient's recovery, both physically and psychologically, there were differing opinions on when a home visit should be completed to ensure it was of greatest value to the patient. There was a perception that too much information about

management at home, too soon, could hinder a patient's recovery. This was in contrast to senior OTs who believed completing a home visit earlier in a patient's rehabilitation could improve a patient's motivation and therefore, enhance recovery and adjustment to life after stroke. A patient's individual adjustment and an OTs approach to home visiting practice influenced decisions about the timing of the visit:

"I'm reluctant to do them too early because I feel then you're never that clear about what you're assessing for. So they tend to be done a week or two weeks prior to them going home...I feel the risk of doing them too early is that you ruin their confidence and their kind of view of what home is going to be like when they're discharged, then you want to create as realistic picture as you can really on the home visit" (Senior OT 18)

"Sometimes if you give too much information too soon it can have a negative response where it does actually increase anxiety. Because people are given the reality too soon...and it could be that the patients on the ward a little bit longer because its increased the anxiety of the spouse or the relatives, when they realise what responsibility it's going to be" (Senior OT 15)

"Previously when I've worked on different units, I've done them quite early on...so that I can then... come back to the rehab unit and say to the clients, right, this is what we need to work on...this is how it gives the client more motivation and you know, often say if they've been on an acute ward for many, many weeks and they've come to us I've thought well they just need time to put everything into perspective and...make it real again... but, the unit I work in now it has been, the culture has been to do a home visit very close to discharge...so it's more about making sure that the equipment's gone in" (Senior OT 4)

These differing experiences and opinions again add to the evidence that home visiting practice was diverse and depended not only on the patient's needs but also the senior OT's individual clinical reasoning and the culture of the unit the senior OTs worked on. A patient's length of hospital stay also impacted on this; if the patient was only admitted for a short period of time the home visit was naturally likely to be completed closer to their discharge. Certain senior OTs reflected that they had had to adjust to different practices or they were attempting to make changes within their team. This again indicated the potential diversity in home visiting practice across the UK and a need to investigate the reasons why different types of home visits were being completed, and whether this was due to patient need and/or OT preference. Both of these reasons could be justifiable, however, these findings highlight the complexity of this intervention and the difficulty in defining a single core value of home visits. Although this should not be a problem, due to the likely multiple values of this practice, it is important to ensure all potential outcomes are measured appropriately.

This theme highlighted a link between what the home visit aimed to achieve and the timing of the home visit.

5.4.4. Instances where the value of the home visit may be limited

The home visit was generally described in positive terms. However, there were four themes that developed, where the senior OTs reported a home visit may not be of value to the patient or where the value of the home visit may be limited:

1. Patients who have cognitive problems
2. Patients being discharged to a care home
3. Patient fatigue
4. Patient anxiety

It was felt important to acknowledge and also discuss these factors as they may conflict with the value a home visit could provide to a patient. These factors therefore should be considered when evaluating this practice.

5.4.4.1. Patients who have cognitive problems

There were mixed perceptions about the value of a home visit for patients who had cognitive impairment after stroke. It was perceived that patients who had cognitive impairment may not understand why the home visit is taking place. Therefore, rather than supporting the patient to adjust and/or recover it was believed a patient could become confused and distressed as a result of the home visit:

“... some of the patients you would be unsure about, would probably be those that maybe already have pre-existing memory problems, so they might not really understand what the purpose of a home assessment is and be able to grasp the concept of what you’re doing so it might be quite distressful to take from home and then bring them back” (Senior OT 6)

“Well one home visit I remember doing was for a lady who had quite severe memory problems following her stroke...we took the lady to the property and it was quite a distressing experience, really for the patient, the therapist and the family members because the patient was walking into different rooms and then saying, 'Whose house are we in?' and 'Is this house for sale?' and 'Are you the estate agent?' ...So things got quite confused and it was difficult to say whether or not the patient felt benefit from that visit because I think she found it quite confusing” (Senior OT 2)

For patients who have reduced memory and lack understanding of the aim and content of a home visit, the senior OTs expressed concerns about the effect a ‘short’ visit may have on the patient. They had concerns about the negative outcomes a home visit had

on a patient's mood due to the stress and confusion of returning home. Therefore the value of having home visit was potentially reduced.

Interestingly, in the 'functional recovery' sub-theme of the 'bespoke intervention' theme, it was reported that patients who had cognitive impairment benefited from more time at home prior to discharge to enable practice and repetition of tasks. Therefore this theme highlighted that those patients with cognitive impairment may require a different approach to a home visit if the OTs are to facilitate a successful return home. Rather than completing a home visit that focuses on assessment with what may seem abstract tasks being performed, it could be preferential to the patient to focus more on supporting skill acquisition, compensating for their difficulties and giving them time to adjust to their return home. This may reflect the different approaches in assisting patients in overcoming functional problems, reported previously.

Harris et al. (2008) support the notion that, as a result of cognitive impairment and characteristics of the home environment, some patients may be more independent in the hospital whereas others may manage better in a more familiar environment. These contrasting examples are of interest and indicate that the outcomes of a home assessment for a patient who has cognitive impairment depends on the patient's level of understanding, but that time to enable the patient to recognise and adjust to being at home was required.

If a home visit was being completed to determine whether a patient should return home, it would seem unethical to complete a home visit with a patient who was unlikely to perform any differently to that in hospital, and where it is likely to cause a patient to become distressed. However, the issue of capacity should be considered here, as patients may become distressed on a home visit but may equally choose to be given, and indeed need, that chance to return home, in order to make their own decisions about returning home. Capacity should be assumed and all reasonable steps

should be taken to ensure a patient is supported during an assessment of their capacity when making decisions (Mental Capacity Act, 2005), including decisions about returning home. This theme highlighted that patients with cognitive impairment were at risk of experiencing distress depending on the focus of the home visit. This needs to be considered when planning and undertaking a home visit with this group of patients and all necessary steps should be taken to reduce potential anxiety for patients who have cognitive impairment.

5.4.4.2. Patients being discharged into a care home

The senior OTs generally reported they did not complete home visits to care homes as there was a belief that the patients' ongoing needs, in terms of equipment provision and care would be met and the OT role would become 'void'. It was stated that the role an OT may have, when someone was discharged home in terms of modifying their home environment and assisting with functional tasks, should be met by the care home. However, it was acknowledged that not all care homes had the necessary equipment, but this did not result in a home visit being deemed necessary. This indicates the influence of resource and decisions being made based on who was responsible for equipment provision. For some it was policy not to do any home visits to nursing homes, with the senior OTs indicating the resource implications and higher management perceiving home visits were not necessary for patients being discharged to nursing homes:

"It is a department policy that we don't actually do any visits for a nursing home unless it is specialist and the reason it is because the nursing home should have its own training for moving and handling so I wouldn't be offering any training around that and I can't offer any equipment either unless its specialist so my function's void really" (Senior OT 11)

“What we do find is some of the equipment recommended by the physios here for transferring like sample turners, rotundas and they use quite frequently in this hospital, and a lot of the nursing homes don’t have that equipment and often say that they’re not trained to use it. So then obviously we need to be very clear about how that person’s going to be transferred when they get to their destination” (Senior OT 6)

The senior OTs did not report that they completed home visits to nursing homes for the purpose of supporting a patient’s ongoing functional recovery. This indicated that the senior OTs perceived patients going to live in a nursing home had less potential to recover at this stage after their stroke. Patients going into nursing homes are likely to be more disabled and dependent, which would indicate a lower chance of longer-term recovery. Interestingly it was reflected that if a patient was mobile and going into a care home, there might be a reason for completing a home visit, indicating that the level of a patient’s dependency influenced perceived levels of recovery and in turn home visit decisions for this group of patients:

“Sometimes people have gone, might be living there because of their needs but aren’t actually bed bound with an electric wheelchair say, so we might have gone then. If there’s an issue, if people are very ill then, and it’s a nursing need to go into a nursing home, no we wouldn’t because their nursing needs would be met, but if they are up and about but might have some extra medical problem, then I suppose it might” (Senior OT 9)

The impact resources had on decision making processes was also highlighted, with patients being discharged to residential and nursing care homes described as being less of a priority:

“I’m afraid I don’t, no unless it’s no..., unfortunately we haven’t got the time for that...and if at times our staffing is a problem from the department guidelines that we have people returning to residential or special nursing homes are less of a priority” (Senior OT 7)

The senior OT interviews did not explore in-depth the specific topic of home visits to care homes, so it was not possible to make further interpretations. However, it was felt important to acknowledge that ‘time to adjust’ was not described as a reason for completing a home visit for a patient going into a care home; even though many of these patients will not only be adjusting to their stroke, but also to a new home environment and one they will be sharing with people they are unlikely to have met before.

The findings suggest adjusting to life after stroke may not be a priority for OTs with this group of patients. However, considering that between 20 and 40 percent of residents in care homes are likely to be there as a result of stroke (Hudson et al., 2007), and in the UK approximately 11% of stroke survivors are newly admitted to care homes (National Audit Office, 2010), education of care home staff on the specialist input a patient has been receiving post-stroke, is an important concern. Although it was perceived that nursing homes should meet the needs of a patient, as suggested by some of the senior OTs, this may not always be the case and there appears to be a lack of consideration about a patient’s quality of life.

It could be argued that this is a stroke population that is being neglected in terms of ongoing rehabilitation, not necessarily through therapists’ choice, but because of the need to prioritise and use resources ‘effectively’.

5.4.4.3. Patient fatigue

There was a perception that home visits can be very tiring for patients and can result in fatigue. The senior OTs described that they carry out a number of functional tasks in a relatively short period of time. This may not be representative of how a patient may go about their daily tasks on their return home, particularly for those patients who suffer from fatigue. Therefore, in certain circumstances, the home visit was perceived to have a negative impact on patients who suffer from fatigue following their stroke:

“Disadvantages well one of the things is the amount of energy that it takes for a stroke patient to go out home, I think that can be a bit of a disadvantage for them, because for even a short home visit we tend to find patients, when they return to hospital they are quite fatigued and it’s something that a lot of people don’t expect the tiredness” (Senior OT 19)

“It’s extraordinarily tiring...So what we can find, especially people who’ve had haemorrhagic strokes, you know fatigue is such a massive problem for them, they can be so tired that you don’t really get a good picture” (Senior OT 12)

If fatigue is an issue for a patient, the content and timing of a home visit need to be taken into consideration to ensure the tasks performed, in the time available, reflect an accurate picture of how a patient would go about completing ADL on their return home.

5.4.4.4. Patient anxiety

Although the senior OTs reported that patients can feel more comfortable performing ADL at home on a visit, it was also reported that patients can experience anxiety as a result of the home visit. In order to alleviate the potential stress and anxiety a home visit may cause, some of the senior OTs reported that they involved the patient in the decision making process about the visit:

"I give the option offered to the patient and explaining to them why I'm doing their home visit and if they feel they would like a home visit to increase their confidence...I think a lot of them they feel it is away from the ward and for them to feel confident again in their own environment." (Senior OT 7)

Senior OT 12 had also introduced a patient-centred approach to home visits to enable patients to become more involved in the home visit, in an attempt to alleviate concerns they may have about the process:

"...by changing the whole emphasis as it being a service for the patient that they choose or decline, that we offer for them to find out how they feel they'll manage at home. It puts the patient very much in control and we've seen a significant difference, you know a reduction in the stress of patients. Because I think they think it's a test... So that's a big difference we can make, but we're a lot slower on this ward you see, so we're not an acute hospital"

Interestingly, this senior OT refers to the lack of pressures encountered in the community setting when compared to an acute setting and perceives this enabled them to take a patient-centred approach to home visits:

"We haven't got that bed pressure, we do have them but we've not, you know we're very much in control as to when somebody goes home or not, whereas on an acute ward it's kind of the medics that decide on it. So we have, that's a big luxury for us that a lot of people don't have" (Senior OT 12)

As with the expert findings, the senior OTs reported that patients can become anxious about the outcome of home visits, but by involving them more in the discharge and home visit process these anxieties can be alleviated.

5.4.5. Summary

The senior OTs reported a number of reasons why OT home visits were of value to patients who were recovering from stroke. These included overcoming functional difficulties, adjusting to life after stroke and preventing patients from coming to harm on their return home.

The key value of the visit was believed to be its bespoke nature and the insight it offered into how a patient managed to complete functional activities within their home environment. Hence, the home visit provided a more comprehensive assessment when compared to a hospital assessment.

The senior OTs believed that the specific value of a home visit may differ between individual patients, with a number of factors, including cognitive, physical and psychological difficulties, influencing this. The findings indicate that a 'one-rule-fits-all' approach to home visiting is unlikely to be successful, as patients are individuals with their own unique needs and home environments which impact on their ability to complete ADL. Therefore OTs who routinely complete home visits without questioning the specific value for individual patients, may be completing home visits that are neither patient-centred nor of value.

It was identified that taking a patient-centred approach to practice may be more difficult for OTs working in acute settings, where the pressure to discharge patients is high but enabling a safe discharge is prioritised. However, the senior OTs perceived the value a home visit can have, in addressing issues that relate to a meaningful life after stroke, was of importance and some felt this should be a priority.

There were differing opinions about the value of completing a home visit for the purpose of supplying equipment, with some senior OTs reporting this was the main purpose of their visits and others believing home visits should focus more on a

patient's recovery. This may reflect the diverse characteristics of patients and the different approaches OTs take towards home visits and stroke rehabilitation.

Investigation into patient perceptions of home visits would identify patient priorities and will support OTs when making home visit decisions with their patients. Chapter six reports on the findings from interviews with patients and offers a comparison with the perceptions of the experts and the senior OTs interviewed, when reviewing the value of home visits after stroke.

**Chapter Six: The value of pre-discharge occupational therapy
home visits for patients who have had a stroke: Patients'
perceptions and opinions**

6.1. Introduction

This chapter presents the findings from the analysis of the interviews with the patient participants (to be referred to as patients from here on). This chapter discusses the patients' perceptions of the value of home visits after stroke. The sample and research procedures are firstly reported; the results are then presented and discussed.

6.2. Patient participant sample

Eight patients who had agreed to take part in the single centre RCT of home visits after stroke (the HOVIS study), took part in this research. Seven of the patients had been selected at random to have a home visit, and one of the patients was identified as needing a home visit prior to discharge from hospital (therefore was recruited to the RCT study as an 'essential' participant - Appendix 1: essential home visit criteria). None of the patients had received an access visit whilst in hospital, but one of the patients had returned home prior to their home visit which was completed on the day of their discharge. All of the other visits were completed in advance of discharge.

Five of the patients were male and three were female. The patients' ages ranged from 63-84. Seven of the patients were White British and one was White European. Two of the patients lived alone, five with a partner/spouse and one with their family. Four of the patients had had an ischaemic stroke, three had had a haemorrhagic stroke and one had had both an infarct and a haemorrhage. One of the patients had had a previous stroke. One patient had aphasia.

The Addenbrookes Cognitive Examination Revised version (ACE-R) was used to assess the level of the patients' cognitive impairment at baseline when recruited. The mean ACE-R score for the participants was 72 (with a range from 36-96). Cut-off scores of <88 give 94% sensitivity and 89% specificity for dementia, and cut-off <82 give 84%

sensitivity and 100% specificity for dementia (Mioshi, 2006). The majority of the sample did have some level of cognitive impairment according to the screen, which is likely to be reflective of a stroke population at this early stage of recovery (RCP, 2012). It should be noted that the participant scoring 36 could not complete parts of the assessment due to their aphasia.

The eight patients interviewed included patients with low, moderate and severe levels of disability and dependency according to the Modified Rankin Scale (van Swieten et al., 1988). The functional ability of the patients was recorded for pre-admission baseline and at one week post discharge when the interview took place, using the Barthel Index. The Barthel Index is a well-recognised disability scale used to determine a patient's level of independence in ADL, consisting of 10 self-care and mobility components (Sulter et al., 1999). The modified version of the Barthel Index was used in this study, with the score ranging from 0-20, with the lower scores indicating a higher level of dependency in ADL (Collin et al., 1988). All of the patients scored between 18-20 for their abilities prior to admission to hospital, indicating that they were reasonably independent with personal care and mobility. The Barthel Index scores at baseline assessment following recruitment to the RCT ranged from two to 15 with a mean score of 8, indicating a range of functional abilities, with those scoring 8 being less independent with personal care and mobility. The interviews were all completed within 11 days of discharge from hospital and the Barthel Index scores at this point ranged from six to 19 with a mean of 13.25.

The patient sample was demographically diverse with the exception of ethnicity. Please refer to table 2 for further details about the patient sample characteristics.

Table 2: Patient participant characteristics

ID	Gender	Age	Marital status	Level of ADL independence (Barthel Index at baseline)	Level of cognition (ACE-R)	Level of ADL independence (Barthel Index at time of interview)
1	Male	67	Lived with partner	11	83	17
2	Female	76	Widow	14	59	17
3	Male	79	Married	2	36	6
4	Female	84	Widow	15	76	19
5	Male	78	Lived with partner	5	74	14
6	Male	72	Married	3	73	7
7	Male	79	Married	8	79	17
8	Female	63	Divorced	7	96	9

6.3. Interview procedures

All of the patients provided informed consent to take part in the study. The interviews took place at the patients' homes approximately one week after discharge from hospital. During four of the interviews a carer/relative was present for all/part of the interview.

One of the patients, who had memory difficulties, could not remember certain aspects of her home visit, but with prompts she was able to remember and offer her perceptions of the experience. The majority of the patients, even those without cognitive impairment, required prompts to remember the exact visit in question, despite this being explained prior to discharge, during consent and then before the interview started. Because the interviews were undertaken one week post discharge, the patients were likely to have had a number of therapists/ care workers/health

professional visiting them, which may account for them needing to confirm the 'home visit' in question.

One patient had expressive aphasia so although they were able to answer and respond to questions, the responses were limited to short sentences as opposed to gaining an in-depth description of their experience.

These interviews lasted between 12 minutes and 47 minutes.

6.4. The findings

6.4.1. Overview

The findings indicated that the home visit was perceived to be of value in setting up the patient's home environment and supporting and/or checking that a patient was going to cope on their return home from hospital.

As with the expert and senior OT findings, the patients perceived that home visits may not be required for all patients returning home after stroke. The findings indicate ways in which the value of a home visit may be improved upon, including a focus on patient concerns, ADL practice and more time being given for discussion. Extra time and support on the home visit may be required to assist those individuals who are returning home to live alone and who have limited social support.

Four themes were developed that outline the perceived value of home visits after stroke:

1. Pleased to be on their way home
2. Preparing the home and the patient for discharge
3. Limited time on the visit
4. The necessity of the home visit

6.4.2. The themes

6.4.2.1. Pleased to be on their way home

The home visit was perceived by the patients as a step closer to getting home. The patients expressed that they were pleased to be going on a home visit as it got them out of the hospital and returning home was in sight. Words such as 'freedom' and 'relieved' were used by the patients to describe the feeling of knowing that they were on their way home. Some of the patients were however indifferent to having a home visit, but explained that it was better than sitting in hospital and being 'bored'. Other patients stated that they were willing to conform to anything that would mean they could get home:

"I was quite happy in as much as I knew that the fact I'd got a home visit they were considering me, releasing me from hospital so I was quite happy to conform with anything that would encourage them to say, you can go home"
(Patient 1)

"It was nice to get back home and have a look round...But with the idea that I might be coming home very soon now it's even a big relief even to think that"
(Patient 7)

"I was dead chuffed about going home and she [laughter] reminded me I wasn't that I was going back I was only coming home for a visit" (Patient 2)

"How did you feel about that?" (interviewer)

"Well it was better than nothing better than sitting in tears in hospital" (Patient 2).

"Well you you're going... home and... and its freedom" (Patient 3)

“I felt I was going to get home which was the only thing I wanted...I was quite elated I was going to get home in the not too distant future” (Patient 5)

The patients expressed that they were aware they would be returning home on discharge and that the visit was part of the discharge planning process. Although previous literature reports that the home visit can be an anxiety-provoking experience for patients (Clarke and Dyer, 1998; Atwal et al., 2008b), this was not evident with this group of patients, who expressed that the home visit had given them hope of returning home soon. This may have been because the patients did not believe that the outcome of the home visit would impact on their discharge destination. Also certain patients in this study had not been asked to practise tasks therefore the potential for participants to feel a pressure to perform may have been removed. However, those patients who practised tasks such as climbing the stairs or making a hot drink did not report any concerns about ‘failing’ the home visit and not being able to return home either. This may have also been because the OTs and patients had already anticipated the problems the patient would encounter on their return home and resolved them prior to the visit. Hence, the visit wasn’t seen as a method of determining whether the patient could return home and therefore the associated pressure that this may cause patients wasn’t evident with this group of patients.

The home visit was generally perceived to be a pleasant experience which precipitated a patient’s return home. Patients expressed that they were pleased to be returning home and that the home visit had given them the hope that this would happen in the near future.

6.4.2.2. Preparing the home and the patient for discharge?

The patients perceived the main focus of the visit had been to check that their home environment was suitable for them to manage on their return home. However the

home visit had not always succeeded in this aim and some patients reported problems instigating recommendations made on the home visit.

Descriptions of setting up equipment and removing potential trip hazards were provided. The patients reported that the equipment provided included toilet frames, commodes and high stools. Some patients also stated that referrals had been made for further home modifications, such as rails and half steps to access their property. Equipment was taken on some of the home visits but for others the equipment was provided after the visit once a patient's needs had been further assessed at home:

"There's a wheelchair, a zimmer, a high stool so that I can sit at the sink and wash my face and hopefully peel potatoes or something like that or anything... that I needed to do at the sink because I can't stand for long before you, before it hurts... but so that's why the high stool was there and I can't think of anything that they missed to be honest" (Patient 1)

"Well its erm (Long pause) I know I know we had... a ra a ramp... and (Clear throat, then pause), we tried it equipment..." (Patient 3)

"I showed them my eating facilities they thought it might be helpful to have a trolley that I could push into the room instead of the zimmer carrying things and I couldn't walk you see" (Patient 4)

"I don't think the toilet frame was there on the home visit coz I would have looked at it, coz I didn't reckon I needed one, but I do need one to get up from the toilet actually" (Patient 2)

The home visit was perceived to highlight potential functional problems that hadn't been considered by the patients. It was perceived that the problems patients may

encounter with tasks such as transfers and accessing different parts of their property could be anticipated and overcome. Those patients who were confident that they would manage on their return home perceived that the visit took place to confirm this to the OT. For certain patients, the home visit was perceived to have been an essential part in identifying how they would manage on their return home and to overcome potential problems:

“Well you can see if you can, you think you can do this that and the other and you can see if you can do a bit of it when you came home. I knew I could walk and so I did” (Patient 2)

“I could from their point of view obviously you can’t just send somebody home and get a phone call sort of a day later saying I can’t do that, so the fact that... the home visit was there for their point of view to see that I’d be alright”
(Patient 1)

*“Without a doubt, it was things that I haven’t even thought about, the height of the bed the amount of steps from the stairs...would I be able to use the stair lift, obviously I’m a bit bigger than *** (partner), I just thought it doesn’t matter I’ll still fit in there, I do but there isn’t the clearance I perceived between the stair rail and my knees...if there hadn’t been a home visit things could have gone disastrously wrong”* (Patient 5)

It was apparent that not all of the patients had practised tasks that were identified as difficult, or attempted to use the equipment prescribed for use at home. For those patients (1,5,6,8) who were more physically dependent and required the use of a wheelchair and equipment to assist them to stand and transfer, the lack of practice may have been because, whichever setting they were in, their ability to transfer would have remained the same. If there weren’t any environmental issues this would not

affect their ability to move at home. Also the home visit may have focused on the emotional and psychological aspects, as previously identified in the expert and senior OT findings. However, this was not evident from the patients' own reflections, as the patients perceived that the main reason for the home visit had been to setup their home environment:

"And did you practice using the high stool when you were on the home visit?"

(Interviewer)

"No... I didn't know I have to say it was just there...But it was just, I have to say they adjusted the legs to suit my height" (Patient 1)

"And did you practice getting on and off the commode?" (Interviewer)

"No I didn't then, not there...But I'd had experience of doing that in hospital" (Patient 1)

"But I didn't see the sense in using your dodgy leg to come down with to put your weight on to come down the stairs this was the better one...the one I'm sure of yeah" (Patient 2)

"So which way did you practice it?" (interviewer)

"I don't know did I only do it once?" (Patient 2)

"Yeah" (Daughter)

Although patients felt more prepared for their return home, as a result of a home visit, certain patients encountered problems with their equipment and the recommendations made on the visit. This was a cause of frustration and a hindrance to functional independence:

"I didn't even practice the equipment... we would have found out that commode didn't work (Laughter)...you see, they just put things down and I say they're

thoughtful bringing everything what was on paper there... they suggest that would be helpful to me and then that was it” (Patient 4)

Patient four goes on to say how this situation may have been improved:

“Well the only improvement that I can think of is that once they deliver their stuff which they are supposed to deliver, they check it first, before they leave it behind. Because if it is not working it’s no use nor ornament” (Patient 4)

Durham (1992), reported that the identification of equipment needs on a home visit, for patients with stroke and brain injury was perceived to be of significant value in enhancing a patient’s functional abilities, and stated these changes may not have been identified had the home visit not been undertaken. Hence, it can be seen that, when equipment is not in place for discharge, this impacts on a patient’s ability to complete ADL. Nygard et al. (2004) reported that patients’ frustrations about returning home tended to be due to problems with equipment/home modifications. This is of interest when considering the perceptions of certain senior OTs, who had looked unfavourably on the value of focusing on equipment provision on a home visit. This will be discussed in chapter seven.

Access in and out of patients’ homes was a difficulty experienced by the patients, either because they were wheelchair dependent or could not independently negotiate steps. For those patients who lived alone and who had limited social support from family and friends, accessing money was identified as a key difficulty in relation to undertaking actions recommended from the home visit:

“I mean I need all these things it’s expense as well isn’t it. At the moment I only got bank accounts and I can’t get access to it unless I visit them and as I’m housebound at the moment it’s very difficult, I haven’t been yet” (Patient 4)

“I’ll give you some examples, it was agreed that over the bath we have two grab rails which were in there from... (Partner’s) first husband when he was ill and I said when I was in getting showered I would have them because there that far apart which makes you feel unsteady, but we have been told that if we want a grab rail there they [social services] will do a delivery in about six weeks’ time well we’re having the house altered so we gotta shower downstairs and toilet downstairs and we won’t need them then” (Patient 5)

Patients who return home to live alone accept a certain level of vulnerability. Health and social care services cannot be expected to provide services ‘in case’ something happens and OTs cannot be responsible for personally checking that every piece of equipment is in working order; this should be the responsibility of the equipment provider. However, what was evident in this study was that although the issue of vulnerability was addressed prior to discharge, the practicalities of arranging the recommendations to be completed for a patient who has limited social support, was difficult.

If a recommendation is not deemed ‘essential’ prior to discharge in terms of safety, patients may be discharged and have the responsibility of arranging these devices themselves. Patient four, who had been left with this scenario expressed that they had felt abandoned:

“The ambulance people came and collected me and there was a debate about if I could take the zimmer home or not, they were just going to dump me in front of the door like a sack of potatoes and that was it. Then I came in and I sat here and waited for over an hour before somebody came” (Patient 4)

The other patient (2) in this study who was female and lived alone had a very supportive daughter and although she had a similar level of needs to participant 4 and

potentially was more vulnerable in terms of reduced cognition, she felt supported socially by her daughter, who was present during her interview.

It would seem that, although the intention to support patients in their transition home was perceived by the patients as a value of the home visit, this was not always realised for certain patients. Interestingly, the literature suggests that one of the key therapeutic elements a home visit can offer is supporting a patient and their carer in the transition from hospital to home and providing a realistic picture of how the patient will cope on their return home (Rogers, 1989; Durham, 1992). If the recommendations made, following home visits are not put in place, inevitably the value of the visit will be diminished, hence the need for patients to be supported to ensure actions are undertaken.

It would seem that the aim of the home visit with the patients in this study was to set up the home environment with the necessary equipment and for some patients to practise transfers and kitchen tasks, but for others practice was not the focus. What is not clear in the literature is the amount of practice that is, or should be, undertaken, on a home visit. It may be unrealistic to think practising tasks such as stairs and kitchen activities on a short home visit would enable patients to manage better on their return home. However, if a patient is not given the opportunity to practise tasks on a home visit, its therapeutic value may be limited. The RCP guidelines state that patients that have been affected by stroke should be given as much opportunity as possible to practise ADL (RCP, 2012). It would therefore seem appropriate that OTs undertaking home visits consider not only setting the environment up, but also practising tasks in order to improve a patient's ability to undertake meaningful everyday activities on their return home.

What also needs to be noted is that, with one exception, this group of patients was randomly selected to have a home visit as part of the HOVIS study. Although home visits were common practice prior to the HOVIS trial beginning, seven of the eight

patients were not identified as needing a home visit, as per the HOVIS study recruitment guidelines. This may have also influenced the content of the home visit including a lack of practice. For example the Westmead Home Safety Assessment (Clemson, 1997) formed part of the intervention, and was something that the OTs had to complete, which steered the focus of the visit towards falls prevention.

The patients perceived that their home visit was of value in assisting them to prepare for their discharge home, by ensuring the home environment was set up. However, in reality, for certain patients problems identified on the visit were not overcome; this resulted in frustration. These frustrations mainly linked to recommendations from the home visit not being realised and problems with the provision of equipment. OTs need to enable patients to problem solve when issues such as these arise, which may not happen when staff are 'busy' as reported in this study. The provision of patient information is of key importance here, so they have the information to refer back to when problems occur.

6.4.2.3. Limited time on visit

This theme suggested that the limited time spent on a home visit impacts on the discussion that can take place and potentially the amount of practice, therefore influencing the value of the home visit for the patient. The home visit for some patients felt rushed, further impacting on the satisfaction of this experience for certain patients.

When asked about any negative aspects of their home visit the main issue for the patients was that there had been limited time on the visit, which was described as 'short'. Some of the patients expressed that they would have liked to have stayed longer at home. There were descriptions of taxis being late which, for some patients, had meant reducing the length of the visit. There was also a perception that the home visit wasn't thorough, due to the therapist being 'busy', this resulted in a patient questioning how effective their visit had been. The lack of time on the home visit was

associated with the therapists not being able to thoroughly talk through patient/carer concerns. However, it was expressed that although more time at home would have been useful, it may then have been harder to return back to hospital:

"Too short, it was almost as if they had been told to be back in a couple of hours or whatever" (Patient 5)

"So would you have preferred it to have been longer?" (Interviewer)

"At least 20 minutes to half an hour" (Patient 5)

"And why was that?" (Interviewer)

*"...we didn't discuss, what they didn't know that I was *** (partners) carer and that would have been brought up had we had longer. All those things that they needed to know they didn't get to know"* (Patient 5)

"They picked up all the rugs that could be dangerous to me, that I might trip over it, but (pause), well (Pause) I don't know if it helped or not" (Patient 4)

"So you're not sure?" (Interviewer)

"No I'm not" (Patient 4)

*"Why do you think that is ***?"* (Interviewer)

"Because things are done a bit slap happy, that is the point they are not thorough enough, that's what, they all seem to be in such a hurry and that is actually the top and bottom of things" (Patient 4)

"Probably if I'd have stopped any longer, it would have pulled a bit harder"
(Patient 6)

It should however be noted that patient two identified that they had not felt rushed at all on their home visit:

“No I didn’t particularly feel rushed no I didn’t think. I just enjoyed it and I enjoyed the journey as well both ways... I could have always extended it if I’d had wanted to stay for another cup of tea or cake or whatever, I could have stayed a bit longer there was no urgency that you’d got to get that drank and get off back again. It was quite nice. Quite pleasant”

The limited time to complete the home visit was perceived by certain patients to have resulted in important aspects of returning home not being addressed, including the necessary support required. With national stroke targets for patients to be seen for 45 minutes of therapy each day (NICE, 2013), and an ever increasing demand and squeeze on NHS services, OTs are faced with the pressure of limited time. However, if home visits are to be of value to patients, OTs who find themselves under pressure to complete visits in a limited amount of time, may need to re-consider the content of such visits. OTs then need to ensure there is time either at the home or in the hospital to address the apprehensions that patients and their carers have about discharge. What is of concern here is that some patients felt they hadn’t had the opportunity to gain access to the support that they felt they required on discharge and perceived that more time to discuss this on the home visit may have helped. Regardless of whether more support had been available for those patients who had felt they needed it, the forum to discuss their concerns was important to patients.

The aim of this research was to investigate the perceived value of home visits for patients after stroke. However, the value the home visit may have had in addressing the carers’ (i.e. spouse, relative, neighbour, or friend) needs post discharge, which was likely to go hand in hand with those of the patients, was also discussed by the patients. Carers may be expected to take on a major new role when they themselves may be elderly and have their own health problems. This could seem an obvious consideration in the discharge planning process, and yet the findings indicate that the needs of the carer had not always been addressed to the patient’s satisfaction and that the home

visit could have played a better part in this had there been more time. Interestingly Atwal et al. (2008b) reported that carers often found the home visit of more value than patients, as they tended to alleviate carer concerns as opposed to patients who experienced anxiety. Atwal et al. (2012:125), following a systematic review of older adults experiences of home visits, reported that *“being open to discussion on how the older adult may cope at home, and what strategies he or she may use, has been highlighted as an area requiring an open mind and a listening ear”*. It would seem for some patients the limitations of time may have impacted on the OTs ability to listen to certain patients’ concerns.

It is unlikely OTs are going to be provided with extra time in terms of staffing, and some teams may even be losing staff due to cuts in the current financial climate. Therefore it is a priority to consider cost-effective ways to maintain/improve OT capacity. Using cheaper methods of transport when going on a home visit and not having to rely on taxis could easily reduce costs.

6.4.2.4. The necessity of the home visit

This theme suggests that home visits may not have been necessary for certain patients who had supportive social networks to enable them to overcome functional problems and may be of more value to those patients who lived alone and had limited support from friends and family. It also highlights that some patients, who were confident in their abilities to cope at home, had not perceived that their home visit had been necessary.

There was an appreciation by the patients that home visits enabled OTs to establish how a patient would manage at home and, as described in the previous themes, certain patients felt it essential in their preparation to return home. However, other patients

did not feel that their home visit had been necessary and were concerned about wasting the OTs time:

“Well I can do things and I know I can do it why do you have somebody wasting their time coming asking me again or can I do it or do you want any help doing it? When I’ve achieved that much for myself” (Patient 7)

Interestingly, the patients were reluctant to say anything that may be perceived as negative, therefore they reflected that the home visit, although not necessary for them, may be of more benefit to other patients, for example for those patients who lived alone or in a type of property that hindered a patient’s return home:

“From my point of view no, because I understood that every patient is individual to a point and that the way of life is different whether you’re on a flat in a high story flat or something or a bungalow, but I knew that my situation was the carers what do you call them therapists whatever...would be happy with the situation and I felt in myself that they knew that I would be able to cope” (Patient 1)

“I think it’s probably useful if you haven’t got very supportive family to welcome you home which I have, I think if you were going to an empty house I think a home visit would be very useful because the carers, you know the OTs and that would know what you could and couldn’t do. But for me I don’t think it made a big difference” (Patient 8)

An investigation into the characteristics of patients receiving a home visit after stroke found that patients living alone were more likely to receive a home visit (Whitehead, 2013). This was likely to be linked to the risks of returning home, being reduced if a patient lived with someone who could support them, hence, less need for a home visit.

Interestingly the outcomes of this study indicated that having a limited social network was a key factor influencing a patient's experience of returning home, despite whether the patient had received a home visit or not. This indicates that regardless of whether a home visit was undertaken, a patient's experience of returning home was likely to be improved if they have a good social network to support them.

The majority of the patients in this study had good social networks and regular daily visits from family and friends and people that they could call upon in an emergency. However, patient four lived alone and reported the least support from family/friends and experienced the most problems with carrying out the recommendations from the home visit. This patient had a higher level of functional ability than the other patients in this study and therefore the care calls they received had been reduced by the time of the interview, further decreasing the social support available on a daily basis. However, the patient's confidence, and issues with regards to vulnerability caused them concern:

"No I'm supposed to have four visits a day: morning, noon, tea time, bed time but since they saw that I can get on myself all these services are withdrawn so actually I am on my own from morning till night and if anything happened to me nobody would know and I would be lost. They told me to have a button fixed but I need an electrician to put a power point, I only got one connection with the telephone and I have, there's nothing come of it yet because I can't fix it. It's all very well thought out but in reality under the circumstances every case is different and it's difficult to know what to do for the best" (Patient 4)

Although it could be assumed that those patients living alone are more likely to require a home visit in view of their vulnerability, if patients are not then supported to resolve problems identified and instigate solutions, the home visit becomes of less value.

The belief that if a patient has support from their family and friends on discharge, there is less need for a home visit, excludes the potential benefits of a home visit for carers who may be undertaking a new role, as previously discussed. Hence the need for further investigation into the perceptions of carers of patients who have had a stroke which would indicate the value this intervention plays in supporting the carer role.

A further influence on how valuable the patients perceived their home visit to be, linked to patient confidence about how they would cope on their return home. Certain patients had been confident about their ability to manage at home and reported that they had coped well following discharge from hospital. Therefore they had not felt that the home visit had added anything to their experience of returning home, because they knew that they could overcome and manage their problems themselves and/or with the support of others.

Patients also reported how they had found their own ways of solving problems; for example one of the patients who was wheelchair dependent had got her friend to carry her up and down the steps to her property. Although the OT had looked at access on the visit, the suggested route had crossed over a grassed area and the patient did not feel this was suitable when it was wet weather. It is unlikely that the OT who completed the home visit would have considered the patient's choice of method a safe option, with a number of moving and handling risks to the patient and her friend. However, it had not been something that had been addressed on the home visit and although the OT had found a way for the patient to access their property, this had not been acceptable to the patient. Clarke and Dyer (1998) also identified that patients found alternative methods to overcome their problems at home, compared with those recommended on a home visit, and reported that professionals rarely ask about such strategies on the visits as they were deemed to be unsafe or less cost-effective than the methods that they had recommended.

If patients feel that they are capable of solving their own problems they are likely to perceive the home visit to be of less value. However, the issue of safety and capacity arises here as patients may choose to solve their own functional problems using a method that poses safety risks.

6.4.3. Summary

These patients were generally keen to return home and believed that the home visit was a step towards achieving this goal and an experience that they enjoyed. This was contrary to expert and senior OT concerns about home visits potentially causing patients anxiety. This may suggest that this group of patients did not perceive that the home visit could affect their ability to return home.

It was perceived the visit gave the opportunity for the OT to install or identify the equipment required and it enabled some of the patients to practise activities they found difficult within the home. However, for other patients limited practise took place and, although they had 'no complaints' about this, the difference a home visit made in terms of preparing a patient functionally for their return home, may be questionable. The psychological benefits, as described in terms of relief and happiness at the thought of returning home, were nevertheless evident.

Interestingly, the home visit was not seen as necessary by all of the patients, particularly those who felt that they would manage on their return home and that the home visit would not add anything to the discharge planning process. Those patients who perceived that they were well-supported socially also felt less need for their home visit. However, the patients were reluctant to criticise the value of the home visits and highlighted the benefit home visits could offer others in addressing issues that may have not been identified, had a home visit not taken place.

These findings highlight how the discharge planning process, including home visits for this group of patients may be improved.

The issue of limited time on a home visit was highlighted by the patients, and was a theme that emerged in the expert and senior OT interviews, also. Some of the patients felt that they had not had enough support on their discharge and felt aggrieved by this. The study highlighted the need to support those with limited social networks in particular, to enable them to action the recommendations made on a home visit and educate patients about how they go about getting help when problems arise.

There were certain similarities in the perceptions of patients to those of the experts and senior OTs in terms of the value of this practice, namely, areas in which home visits could be improved, and home visits being of more value to certain patients than others. The patients were able to give an account of problems that they faced on their return home, putting the value of the home visit in to context with patient priorities. The similarities and differences in perception and opinion within and across the three participant groups' data sets are now discussed in chapter seven.

Chapter Seven: Discussion

7.1. Introduction

This chapter draws together and discusses the key findings from the thematic analysis of interview data generated with the three participant groups: experts, OTs and patients. Following separate thematic analysis of each of the participant interview data, the findings were compared for similarities and differences within and across the data sets' themes. The results were tabulated into a table to provide a visual image of the themes, which assisted in this comparison process (Table 3). The themes were compared in terms of their meaning in response to the research question, to form the research discussion.

Table 3: Themes identified from participant groups

Experts	Senior OTs	Patients
1. Person, function and environment fit	1. Overcoming functional difficulties	1. Preparing the home and the patient for discharge?
2. Managing risk at the cost of promoting independence	2. Preventing harm	2. Pleased to be on my way home
3. Effective use of resources	3. Adjusting to life after stroke	3. Necessity of home visit
4. Patient control	4. Instances when the home visit may not be deemed of value	4. Ways in which the home visit could be improved
	←5. A bespoke intervention→	

7.2. Discussion overview

In response to the research question, the findings suggest that patients', senior OTs' and experts' perceived that pre-discharge home visits after stroke had a number of different purposes each with potentially differing values to patients, OTs and the hospital organisation. Therefore defining the unique value of home visits for individual

groups was difficult. This should be considered when investigating the effectiveness of home visits after stroke.

Despite the different purposes for completing a home visit, there was a perception across the three participant samples that the key value of a home visit was the opportunity it provided to identify and overcome functional and/or environmental problems that would not have been highlighted in hospital. Therefore the findings indicated that home visits after stroke provided a comprehensive assessment of a patient's needs, when compared to a hospital assessment, due to it being a more patient-centred assessment.

The participant groups were all in general agreement that home visits, although an important part of stroke rehabilitation, were not necessary for all patients. The influence of cost and resource use was evident in the expert and senior OT participant findings, when referring to who should receive a home visit and what the content of a home visit should be. Descriptions of who benefits most from this intervention, and the most valuable reasons for completing a home visit were reported across the data.

The main differences in the participants' opinions arose in the different value placed on completing home visits for the purpose of risk assessment/management. There were also mixed opinions as to whether home visits were of value to patients who have cognitive impairment.

The findings indicated improvements that could be made to the home visit and to the discharge planning process in general after stroke. It was suggested that more time for discussion and enabling a patient to manage their life after stroke by taking more control were important considerations for future practice.

There were four key findings in response to the research question; ‘What is the value of pre-discharge occupational therapy home visits after stroke?. Patients’, senior occupational therapists’ and experts’ perceptions:

- Seeing is believing: Home visits after stroke are more valuable than hospital assessments when discharge planning
- Certain reasons for completing home visits are more valuable than others
- Home visits are not of value to all patients leaving hospital after a stroke
- Ways in which the value of a home visit after stroke could be improved

The key findings are now discussed and include both the similarities and differences in the perceived value of OT home visits after stroke, from both within and across the three participant groups.

7.3. Seeing is believing: Home visits after stroke more valuable than hospital assessments when discharge planning

The key value of having a home visit was reported to be the assessment of the unique characteristics of an individual’s home environment, and how this environment enabled a patient to complete functional activities, whilst considering the impact of their stroke. Hence, the value of a pre-discharge OT home visit was perceived by the participants, to be a bespoke intervention that addressed the specific needs of the patient.

OTs had alternative means of identifying information about a patient’s home environment, some of which provided an observation of the patient’s home environment, i.e. access visits and use of photographs. However, it was evident that all three participant groups believed that the home visit could offer a more patient-centred/accurate assessment, as it provided evidence of the patient, function and environment ‘fit’, post stroke. Without completing a home visit this ‘fit’ was not

observed and the OTs and patients had to rely on information that may not be accurate. The participants described how the home visit provided a unique observation of a patient performing functional tasks within their home environment that could not be replicated in the hospital setting, thus providing the patient and the OT with a representation of how a patient will manage on their return home. Therefore, the visit was perceived to better equip certain patients in the transition from hospital to home.

The importance placed by the participants on an environmental assessment is supported by OT models of practice, including the Person- Environment-Occupation Model (Law et al., 1996) and the Model of Human Occupation (Kielhofner, 2007), which advocate the need to identify environmental factors and how they impact on an individual's occupational performance. Although alternative methods of identifying environmental factors were identified the importance placed on the observation of the congruence between the person, their environment, and their occupations, outweighed the value of alternative methods, where the patient was not observed at home.

The World Health Organisation's Classification of Functioning Disability and Health (WHO, 2001), also incorporates a person's 'Environment', reflecting the importance placed on identifying potential environmental factors that influence participation and functional activity. This further indicates the importance placed on a holistic assessment of a patient's ongoing needs.

OTs' observations of patients performing ADL at home provided an insight into patients' functional abilities that were not captured in hospital. This was likely to be due to the safe confines of the hospital setting that did not highlight the hazards and physical problems in a patient's own home. It was also argued that certain patients performed better at home, as the environment was more familiar to them. Both of these reasons provide an insight into why home visits were believed to offer more

value than a hospital assessment alone. This finding is supported in previous studies (Chatfield, 1995; Taylor et al., 2007). Chatfield (1995) found that more problems were highlighted during a home assessment when compared to a hospital assessment (22 extra problems compared to the hospital interview), and therefore argued that the quality of the home assessment when compared to a hospital assessment, outweighed its increased cost. Taylor et al. (2007) in a small Canadian study also reported that an increased number of problems was identified on a home visit when compared to a hospital interview. Interestingly, no significant difference was identified between the number of problems reported in a home assessment and a hospital assessment, which differs from the findings of Chatfield (1995). Conversely, Drummond et al. (2013) reported no significant difference in the functional outcomes of patients who had had a stroke and received a home visit and those who received a hospital interview. This could indicate that it was the detail the assessment went into, as opposed to where the assessment took place, which enabled a more comprehensive assessment. This would also account for the views of experts/patients who reported the short nature of a home visit did not provide the detail required to address a patient's problems on their return home. It should be noted that the study undertaken by Drummond et al. (2013) was a feasibility trial, and therefore was not statistically powered to find significant differences between the control and intervention group outcomes.

If alternative, less costly methods of home assessment were able to identify and address the same number of problems that a patient faced at home, without having to undertake a visit, it may seem an unnecessary use of resources to complete a home visit. However, what these alternative assessments did not provide was an observation of how a patient performed in their own environment, which in certain cases was perceived to provide far greater value to both the patient and the OT.

However, whilst OTs reported that they gained a more comprehensive insight into a patient's functional abilities at home, the advantages this gave the patients in this

study was not always as apparent, with some believing that their home visit had not been necessary. This may have been because only one out of the seven patients was identified as needing a home visit, whereas the others were randomised as part of the HOVIS study. However, certain senior OTs maintained that they would routinely complete home visits with the majority of their patients, and indeed some of these patients may share the opinions of those interviewed in this study.

This difference in perceived necessity of assessing a patient at home is supported by Stephenson and Wiles (2001). They reported that although therapists believed more appropriate and individualised programs of intervention were designed as a direct result of the home visit, service users more typically felt no advantage of one environment over the other for practising skills that they had been taught (Stephenson and Wiles, 2001).

This study suggests that the emphasis placed on the value that the home environment can bring to a patient's rehabilitation programme may differ between OTs and patients. This may be because of the differing roles of the OT and the patient, and the patient having the advantage of knowing their home environment whilst this information was new to the OTs. The emphasis placed on the environmental assessment therefore could mean more to an OT in terms of the person, function and environment 'fit', than to the patient.

These findings indicate that alternative methods of identifying a patient's physical environmental needs may be considered. However, in response to the research question; the value the pre-discharge OT home visit had in allowing an observation of how a patient performed within their home environment, was identified as providing a more patient-centred and comprehensive assessment, when compared to a hospital assessment.

7.4. Pre-discharge home visits of value to some patient groups more than others

In an ideal world the OT and expert participants presented cases whereby home visits were of value for a large proportion of patients who have had a stroke. This is in line with previous studies with some explicitly stating that due to the nature of this condition, patients who have had a stroke are more likely to require a pre-discharge home visit (Chatfield, 1995; Hale, 2000). However, the majority of the OTs in this study, along with the experts and the patients felt pre-discharge home visits were not necessary for all patients returning home after stroke.

A variation in the number of visits being completed across the UK was highlighted by Drummond et al. (2012), but the reasons for this remain unclear. In line with previous research (Lannin et al., 2011; Drummond et al., 2012) there was a sense from the senior OT and expert findings that fewer home visits were being completed when compared to previous practice. This was reported by the senior OTs and experts to be due to a reduced amount of time and resource to complete home visits after stroke, when compared to previous times.

In view of the pressures on OTs time the participants described who a visit was perceived to be of most value to and certain groups of patients who were unlikely to require a visit, or whom a visit may be detrimental to. Factors that influenced perceptions about whether a home visit was required or not related to a patient's level of impairment/dependency, and whether the patient lived alone/had a good social network.

7.4.1. Level of cognitive impairment

An important finding was the different experiences of completing home visits with patients who have decreased cognitive function after stroke. Instances where patients with cognitive impairment had been taken on home visits which had caused them to become distressed, were reported by senior OTs and experts. There was also a general concern about patients with cognitive impairment not wanting to return to hospital after the visit, although none of the OTs reported that they had actually experienced this. Patients who have reduced memory, orientation or other cognitive impairment may not fully understand the purpose and outcome of a home visit, which could heighten their anxieties. However, interestingly, the patients in this study, some of whom had cognitive impairment, did not report that they had felt anxious about having a home visit. This was possibly because the visits were not believed by patients to influence their discharge destinations.

It would seem unethical to complete a home visit with a patient when they are unlikely to perform any differently at home than in hospital, and it could potentially cause them distress (Mountain and Pighills, 2003; Atwal et al., 2008b). However, the issue of capacity and patient preference should be considered. Patients may become distressed on a visit but may equally choose to be given and, indeed, need that chance to return home, in order to be supported in making their own decisions about returning home.

Despite the concerns raised about completing home visits with patients who have cognitive impairment, certain OTs reflected home was the best place to practice ADL, and that the home visit helped a patient to understand their difficulties and to be given a chance to return home. This was also supported in the expert findings.

The severity of cognitive impairment could be accountable for differing experiences and opinions. For those patients who had severe cognitive impairment, the environment where ADL took place may not have had a significant impact, due to low

levels of function and high levels of dependency required whichever environment a patient was performing in. Research does indicate that for those patients with cognitive impairment, functional independence remains limited (Patel et al., 2002). However, for those patients who had mild to moderate cognitive impairment, the familiarity of their home environment may have enabled patients to perform better, presumably as they were able to draw on the cognitive resources of their long-term memory and orientation. This is supported by Provencher et al. (2009) who hypothesised that, for those patients where a difference in functional performance between settings is observed, patients with less severe cognitive impairments may do better in the familiarity of their home environment, when compared with those who have more severe cognitive impairment. This could account for the difference in opinions identified in this study, as the OTs may have been reflecting on patients with differing levels of cognitive impairment.

Interestingly, Drummond et al. (2013) found those patients who were recruited to a cohort study and felt to require a home visit, had lower cognitive scores than those who were not felt to require a home visit, potentially highlighting differing practice for this group of patients. As indicated by Whitehead (2013) decisions about home visits are based on a number of factors that balance each other out, so it may be difficult to determine exact characteristics of those patients requiring home visits due to the complexity of these decisions and patients' individual circumstances. It would, however, seem imperative to include patients who have cognitive impairment, and who may not be able to provide informed consent, in future home visit studies, in view of the conflicting opinions expressed about the particular value a home visit can have for this group of stroke patients.

7.4.2. Level of physical impairment

A common reason for completing a home visit was to identify how a patient, who had a physical impairment as a result of their stroke, would manage to mobilise and transfer within and around their home. Those patients with severe physical disabilities, who required a hoist to transfer and spent the majority of their time in bed, were perceived by the experts and the senior OTs as less likely to benefit from having a home visit. It should be noted that those OTs who completed home visits with the majority of their patients, also routinely completed home visits with these patient groups.

The findings suggest that, as patients who had a severe physical impairment were not able to perform functional tasks without major assistance, the value a home visit offered in terms of identifying how functional performance could be improved was limited. Despite adjusting the environment, the patient would still be unable to perform ADL due to the severity of their impairments. This was evident in the patient findings, where those patients who were severely physically disabled completed fewer tasks on the home visit. For those patients who have greater levels of physical dependence, OTs may feel able to assess their needs within the hospital, as performance is unlikely to change despite a difference in the environment, and alternative methods of assessment such as an access visit could identify whether there was enough space for necessary equipment.

Those patients who had moderately severe levels of physical disability, i.e. those who had limited mobility but were not bedridden, according to the modified Rankin Scale (van Swieten et al., 1988) were perceived to benefit most from having a home visit. As with those patients who had cognitive impairment, this may have been due to a level of variability in their performance depending on environmental factors. For example, a patient who were limited in their ability to walk independently, may have been at increased risk of falls in a more hazardous environment, and found undertaking ADL at home different compared to their performance in hospital, due to a different

environmental set up and the challenges this poses. Hence, the risks of returning home may be less clear, and functional performance may vary within the home environment. Yates et al. (2002) identified in a cohort study of 208 community dwelling stroke survivors, that those patients with less impairments were in fact more likely to fall, and concluded that this was likely to be due to patients being more mobile, and therefore more at risk of encountering a fall.

This study suggests those persons with moderately severe levels of either cognitive or physical impairment have increased demands on them as a person, hence the need to alter the interface between the home environment to maximise occupational performance. Those patients with mild impairments had less demands on occupational performance and the impact at home was therefore not a concern. For those with severe levels of disability, altering the environment or the occupation at home was also not felt to be as necessary, because of the extent of the person factors, adapting the environment at this stage would not have improved congruence and in turn occupational performance.

7.4.3. Social support

Whether a patient lived alone and had a good social network were also identified as impacting on the value of a home visit, with certain patients not feeling it necessary to have had a home visit due to the social support they received on discharge from hospital. This is likely to be because those patients living alone who did not have family and friends to support them on discharge, may have struggled with their reintegration into the community and were more vulnerable on their return home. Previous studies investigating discharge destinations post stroke support the notion that a patient's social network/family does influence whether a patient will be able to return home (Wee et al., 2005; Massucci, 2006).

The frustrations expressed among the patients in this study were mainly due to overcoming problems that resulted from recommendations made on the home visit. Had someone been able to support certain patients in overcoming these problems, their return home may have been made easier. Conversely, certain patients stated the functional problems that they faced on their return home were overcome because of the support of their family/friends. Here the actual value of a home visit was diminished as, regardless of whether a patient received a home visit, it was identified that if a patient lived alone the success of their transition into the community was determined by the support that they received on discharge.

With health and social service cut backs, more individuals may find it increasingly difficult to manage at home alone. Health professionals may need to seek alternative methods of finding support such as the voluntary or private sector services for those patients who do not 'need' social/health support, but nonetheless are still vulnerable and feel, themselves, that they would benefit from an increased social support. In the long term this may assist patients in remaining at home.

7.5. Certain reasons for completing a pre-discharge home visit are more valuable to patients than others

The findings indicated that the value of completing home visits for different purposes did vary, with the focus of certain home visits being perceived by the participants to be of more value than others. However, opinions were mixed both within and across the participant groups.

7.5.1. Risk management

A difference in opinion was particularly evident regarding the value of completing home visits to assess and manage risk. The expert findings indicated concerns about

using home visits purely to manage risk. However, there were descriptions across the data sets of instances where it was perceived that if a patient had not been assessed at home prior to discharge, their safety would have been compromised, or the option of returning home would have been ruled out due to concerns about safety at home.

The findings suggest that home visits were perceived to prevent risks such as falls and hospital readmissions as a result of injury, hence being of value to both the patient and the hospital organisation. This focus on falls prevention and patient safety is in line with what the literature reports to be a main focus of home visits (Barras et al., 2010; Lannin et al., 2011; Drummond et al., 2012). However, certain patients in this study indicated that, although they could see the reason why OTs might want to check everything was ok for their return home, they themselves had not deemed this necessary as they knew that they would cope. Thus, potentially reflecting that in some circumstances OTs may have more concerns than the patients about the patient returning home. However, for those stroke patients with reduced capacity to appropriately weigh up the impact of their disabilities at home, the OTs skills in analysing a patient's occupational performance is more likely to be required.

It is important to consider why OTs may feel differently, compared with certain patients and experts, about the value home visits had in the management of patient safety. As previously stated, patients were likely to be returning home sooner with reduced lengths of hospital stay, hence a potential increased level of vulnerability. The OTs responsibility of ensuring patient safety is both understandable and necessary considering their Code of Ethics and Professional Conduct (COT, 2010). However, the experts raised concerns about risk adverse practice and highlighted that home visits may be being completed unnecessarily in some cases due to a fear of risk.

As noted by Mandelstam (2005:34):

“Concern about risk and the associated fear of litigation can, if unchecked, lead to excessive anxiety about risk and inappropriate, over defensive practice.”

The experts' views about risk adverse practice were particularly noteworthy because research investigating OTs' effectiveness in reducing safety risks for patients on their home visit is limited. However, the experts interviewed were not faced with the day to day challenges, which OTs encounter, of weighing up risks and being under pressure to discharge patients, hence resulting in a potentially differing perception.

It was argued that, by focusing on patient safety, the need for pre-discharge home visits has been questioned, as certain safety aspects can successfully be assessed using alternative methods. Indeed, Rogers (1989:78) makes the point that:

"Safety qualities are more standardised from home to home, unlike the competence-supporting and stimulus producing qualities, which are highly individualised."

If OTs complete home visits purely to 'check' that a patient's equipment is set up and reassure themselves about risk concerns, it was suggested that they may not be necessary.

7.5.2. Equipment provision

Certain senior OTs argued that provision of equipment did not require the expertise OTs have, and played down the value of home visits for this purpose, suggesting that someone with less skills could provide equipment. Aspects of equipment provision may not require specialist skills depending on the patient's performance. However, certain home modifications/ pieces of equipment are classed as bespoke to an individual's needs, therefore requiring specialist skills to determine the patient's requirements.

The perception that home visits should not be undertaken for the purpose of equipment provision only, may come as a surprise to those OTs who believe this to be a primary role of the home visit, as was the case with certain OTs, experts and patients who were interviewed. The provision of equipment was a common part of an OTs role in the acute hospital setting and can support not only a patient within their home but

also to access their wider community, for example, by the provision of ramps for those patients who were wheelchair dependent. Indeed, previous research has suggested equipment provision is more specific following a home visit when compared to a hospital assessment (Chatfield, 1995; Taylor et al., 2007). It has also been reported that the provision of aids and equipment was the most documented recommendation from home visits after stroke, followed by structural adaptations (Clarke and Gladman, 1995), thus further indicating the importance of this as a purpose for completing a home visit. However, whether this required the skills of an OT came into question in this qualitative study.

A concern expressed by certain senior OTs in this study was whether patients actually wanted equipment and if they used it when it was provided. However, Reid (2004: 571) found that patients, who had a mild disability after stroke, generally found assistive devices helpful, for example bed rails, grab bars and raised toilet seats. The patients in the present study highlighted also the value placed on equipment provision and problems encountered when equipment had not worked, which had limited their independence in ADL. Also, in view of the ever decreasing hospital length of stay, the provision of equipment to meet patients' needs at an earlier stage of their rehabilitation was likely to have increased.

It is of interest that there were differences in the perceived value of completing a home visit for the purpose of equipment provision. To address a patient's personal goals and functional independence, the use of equipment may be the intervention used by OTs. It is therefore interesting that some OTs underestimated the value of equipment provision. This appeared to be linked to OTs who had to defend their practice and in doing so believed interventions other than equipment provision, were of more value to patients, on a pre-discharge OT home visit.

7.5.3. ADL, participation and quality of life

Certain participants felt that the role of the home visit in enabling functional activity and improving a patient's quality of life was currently being neglected in favour of 'quick checks', measuring furniture and a focus on minimising risks. This caused concern for certain expert and senior OT participants, who articulated disappointment in the way current home visiting practice was perceived to be taking place. This disappointment stemmed from the belief that the home visit should offer 'so much more' in terms of enabling functional independence, participation and quality of life.

Patients who have had a stroke have a number of potential barriers to participation in everyday activities which can lead to anxiety and social isolation (Lamb et al., 2008). The National Stroke Strategy (2007) acknowledged the need to address social isolation, the importance of life after stroke, and the need for patients to be supported in accessing their wider community. The findings of this study reflect the perceived value a home visit could play in identifying barriers to activity at home and participation in a patient's wider community, therefore facilitating transition from hospital and enabling a better quality of life. Pound et al. (1998) recommended that disability should be reduced through rehabilitation and tackling environmental problems which may imprison patients in their home. Hence, the perceived role a home visit played in supporting this transition and reducing social isolation, by overcoming environmental barriers.

It was particularly evident in the expert and senior OT findings that there was a conflict of interest for OTs who were drawn both by their professional duty to ensure a patient's safety but also to enable functional independence and enhance a patient's quality of life. This is likely to reflect the current financial climate, and acute hospital commissioners may consider rehabilitation and addressing issues such as a patient's access to their wider community less of a priority for an acute hospital OT. However, as pointed out by Hale (2000:15), when OTs avoid issues that relate to a patient's social

isolation on a home visit, “ *they are abdicating from their role which encompasses the responsibility of considering all areas of human occupation*”.

With home visits focussing on getting a patient home safely, this intervention has moved away from recovery and addressing quality of life issues, which in itself is a risk for patients in the longer term, when considering a patient’s functional and psychological well-being.

For OTs who were able to refer patients onto supportive community stroke teams, the need to address these issues at the point of discharge was not as necessary. With the growing evidence to support early supported stroke discharge (ESSD) teams (Langhorne, 2005; Fisher et al., 2011), a reduced focus on recovery and adjustment in the acute hospital setting at the point of discharge, may be less of a problem. However, ESSD teams have only been shown to be effective for those patients with a mild to moderate impairment (Langhorne, 2005). Over 300,000 stroke survivors are reported to be living with a moderate to severe disability (National Audit Office, 2010) and do not meet the criteria for ESSD schemes on discharge from hospital. These were the patients for whom it was identified a home visit was most likely to be required, as supported by Whitehead (2013). Therefore, if specialist stroke services are not available in the community, the need for home visits may increase.

Despite the increased drive for community stroke services to take on more of a rehabilitation role sooner in a patient’s recovery, there still remains the perception that home visits after stroke are key in a patient’s preparation process prior to leaving hospital, as this facilitates a patient’s transition and adjustment when returning home.

A suggestion made in the expert findings could potentially fill this gap, as it was recommended that in-reach services from the community could carry out home visits prior to discharge. This was something that was also reported as happening by some of

the senior OTs who were interviewed. Potentially this could enable patients to be discharged with a continuous support team, preventing some of the transitional problems that were reported to occur on discharge from hospital.

7.5.4. Adjusting to life after stroke

The experts and senior OTs perceived that patients went through a period of realisation when returning home. It was perceived that the home visit enabled patients to accept the effect their stroke had made on their life. In turn they began to address difficulties they faced at home. This may be something that cannot be replicated in hospital, because it is an experience unique to returning to the patient's own home.

Although the patients in this study did not specifically indicate that the visit had helped them in adjusting psychologically to life after stroke, there was a general sense that the home visit had been an enjoyable experience and one that had given them hope and enthusiasm for returning home. This in itself is likely to have impacted on their psychological and emotional well-being.

The ability of a one-off home visit to influence a patient's ongoing emotional and psychological state may be questioned. However, the HOVIS feasibility RCT did indicate that those patients who received a home visit had better mood scores at one week than those who were in the control group. The HOVIS study was not statistically powered to detect a significant difference in the control and intervention group outcomes, and therefore these results should be viewed cautiously (Drummond et al., 2013: 393). Nevertheless, in view of the perceived value a home visit can have in supporting patients to adjust, future research should incorporate a measure of this impact.

The limited research that has been completed, investigating the value of pre-discharge home visits, has mainly tended to focus on tangible outcome measures, such as falls and levels of functional independence (Pardessus, 2002; Lannin et al., 2007). The findings of this study suggest future research needs to include a measure of patient adjustment on their return home. This would identify if a home visit does indeed influence and prevent problems associated with poor adjustment, i.e. depression, anxiety and problems with management of life after stroke.

7.6. Ways a pre-discharge home visit could be improved

Although home visits were reported to be of value to patients who have had a stroke, the participants did identify areas where the home visit experience could be improved. These improvements related to the focus and content of home visits after stroke, and the time spent at home prior to a patient being discharged. It is important to consider these potential improvements, as they were perceived, by the participants, to improve the value of a pre-discharge OT home visit after stroke.

7.6.1. A graded home visit approach

When reflecting on previous practice the senior OTs and experts described a graded home visit approach, where a patient would have more than one home visit. This entailed the patient re-familiarising themselves and practising functional tasks within their home environment as part of their rehabilitation, with the ultimate goal of returning home. In view of doubts about a short home assessment being able to effectively support the adjustment phase (Mountain and Pighills, 2003), extended periods at home prior to discharge was also suggested. This was believed to support patients in self-managing their condition and highlighting difficulties they may face on their return home. Despite the RCP guidelines that support patients having extended periods at home prior to discharge (RCP, 2012), it was reported by the experts and the

senior OTs that the opportunity to have extended periods at home prior to discharge had been reduced, and when patients were able to return home 'safely', there was pressure to discharge them.

This issue raises the likelihood that certain patients may no longer be receiving the intervention that they once would have had to enable them to return home from hospital, or that patients may return home sooner in their rehabilitation, potentially with a higher level of dependency. As previously discussed, if appropriate community services are available, a graded discharge approach may be feasible. However, for those more vulnerable patients, if it is not safe for them to return home as a result of hospital assessments, then alternative accommodation is likely to be sought, potentially at an earlier date than in previous times. Moats (2006:107) recommended that:

“where possible, decision-making about long-term care needs should occur in the community or longer-stay rehabilitation settings that allow time for negotiated client centred processes.”

It would seem the ability to do this is being affected by decreased hospital length of stay.

This study did not specifically focus on patients who had spent extended periods of time at home prior to discharge. It is unlikely that research into this area would be seen favourably by hospital commissioners as, although this graded approach could have an impact on a patient's quality of life, it could be perceived to increase length of stay. However, giving patients the opportunity to remain at home for longer periods prior to discharge, i.e. over the weekend when therapy may not be available, could equally have a positive and cost-effective impact on reducing re-admission and a patient's ability to self-manage.

7.6.2. Information exchange

Despite having a home visit, certain patients in this study reported frustrations that they had experienced on their return home, which had arisen from home visit recommendations not being realised. Some of the problems the patients faced were down to other agencies, e.g. waiting for home modifications and problems with equipment. Although it may be argued that hospital OTs cannot be responsible for the waiting lists of social services for modifications or the identification of broken equipment, it should be their responsibility to educate patients on how to overcome concerns and problems which they may have on their return home.

The findings suggest that patients who have had a stroke do not always feel equipped to manage their day to day difficulties: this is particularly true of patients who have a limited social network to support them in overcoming their functional difficulties. If OTs are to be supportive of patients to self-manage their lives after stroke, they need to be providing them with the tools to do so, particularly when considering the stress and anxiety patients can feel when coming to terms with the aftermath of their stroke. The provision of information would seem a key priority here in order for patients to have the necessary contacts and tools to assist them on their return home.

A lack of discussion was identified as a negative aspect of the home visit for certain patients, which was attributed to a lack of time. Allowing patients and their families/carers time to discuss their concerns and being given information that will enable them to access the services that are available, was desired. The importance of information provision is supported by the findings of the Daily Life Survey (Stroke Association, 2012).

Some may question why it was considered of more value to have this discussion within the home environment when it could take place in hospital, at less expense. What was evident in the findings was that, by having this discussion within a patient's home, the

patient has control and the discussion is based on the outcomes of a patient-centred assessment, where the specific needs of the patient at home are identified. This did however, contradict the expert perception that OTs may not always be patient-centred, with the focus of the visit usually tending to be led by the OT. This again indicates a potential difference in what is perceived as ideal and what is the actual focus of practice.

7.6.3. Time spent on a home visit

Patient fatigue was deemed to be a potential negative experience for patients who were asked to complete a number of functional tasks in a relatively short space of time. There were, in turn, concerns that the home visit does not accurately replicate the usual nature of a patient's occupational performance throughout the day at home. This is noted by Mountain and Pighills (2003:150) who expressed concerns about current home visiting practice, for the frail elderly, only providing a 'snap shot in time', which does not necessarily predict their capacity to remain at home. Therefore, patients suffering from fatigue may require longer to perform tasks on a home visit.

Whilst it was expressed that home visits should take both holistic and patient-centred approaches to a patient's community reintegration, it was evident that, in reality, stroke teams were under pressure to discharge patients as quickly as possible. In doing so, this could impact on the quality of the home visit, which for some patients becomes a 'check' as opposed to a thorough assessment of a patient's performance and ongoing needs at home. The differing content of home visits, as previously described, is also likely to impact on the time spent at home. This may be accountable for the findings of a recent stroke survey indicating the vast differences in length of home visits after stroke (10-135 minutes) (Drummond et al., 2012).

OTs need to consider carefully the purpose of completing a home visit and, if it is deemed a visit is required, an appropriate amount of time should be set aside to achieve the goals. Without the allocation of an appropriate amount of time, the value of the home visit could be diminished.

7.7. Summary

The findings suggested that pre-discharge occupational therapy home visits after stroke were perceived by the patients', senior OTs' and experts' to be the OT ideal for assessing a patient's functional performance and ongoing needs at home. If the implications of time and cost did not have to be taken into consideration, it appeared likely that more home visits would be completed. However, practice was influenced by the resource implications and necessity of a home visit, and the participants reasoned which patients would benefit most from receiving a home visit, and what a home visit should entail in order to provide the greatest possible value.

The cost of a home visit, when compared to a hospital interview, was calculated by Drummond et al. (2013) and, perhaps not surprisingly, was found to be more expensive. However, what is still unclear is the cost-effectiveness of pre-discharge home visits for people who have had a stroke. Although more expensive, if, as suggested in this study, home visits can prevent hospital readmission, enhance a patient's independence in ADL and adjustment to life after stroke, they may in fact be cost-effective. If perceived cost is a factor in reducing the number of home visits, it is vital that further research identifies the cost-effectiveness of these visits for the different potential benefits a home visit can provide patients after stroke.

7.8. Study limitations

This research has added, to a previously limited evidence base, an analysis of the value of home visits after stroke. However several limitations need to be acknowledged.

The literature search

The literature search was limited to papers written in English. In addition to the search engines used AMED, Scopus and Web of Science would have also been appropriate search engines. On reflection when considering the inclusion criteria the use of truncation could have been used to widen the search criteria i.e therap* would have covered therapy and therapist.

The participant samples

The nature of the criteria for the identification of experts limited the number of potential experts available; therefore, the expert sample was small. The HOVIS team also identified the experts based on their experience and knowledge, which limited the sample to those experts that they were aware of. By including non-OTs in the expert sample, the specific knowledge gained from experiencing a home visit may have been diluted. However, as non OTs do influence this practice and the development of guidelines, it was felt important not to limit the sample to experts with a background in OT.

The senior OTs were recruited from a specialist section group; therefore it could be argued that the responses were those of a specific group of OTs as opposed to the general OT population working in rehabilitation after stroke.

The patient sample was a convenience sample and was based on accessibility of patients who were taking part in an RCT at one location in England. Only one of the patients had *required* a home visit, according to HOVIS study criteria; all of the other

patients had been selected at random to receive a home visit. In view of the fact that these patients were RCT participants, the study may be criticised for not reflecting what happens in the 'real world'. However, prior to the commencement of the RCT on this unit, the OTs routinely completed home visits with a large proportion of their patients, including those patients being discharged to care homes.

The patient sample is likely to have reflected the perceptions of an elderly population only. A key difference here may be patient experiences of returning home to live alone, whereas a young stroke survivor may have larger social networks to draw upon. However, the issue raised by the patients with regard to the importance of having a supportive social network was equally likely to be of importance to younger stroke survivors.

As the majority of patients were taking part in an RCT, their experience of having a home visit was standardised to a point and therefore may not be representative of home visits in other areas.

Use of the Westmead Home Safety assessment in the feasibility RCT

Use of the Westmead Home Safety Assessment meant that the content of the patient participants' home visits was directed towards the management of falls, due to the nature of the trial study design, which may not be reflective of general OT practice. However, as reported by the OTs, and in the literature, current home visit practice does tend to have a major emphasis on patient safety, and therefore this assessment was not felt to be an uncommon part of practice.

The interviews

On reflection, although the expert and senior OT participant topic guides covered a large amount of information, and a breadth of potential perspectives about the value

of the home visits was obtained, the depth of certain interview data was limited. Thus, certain interviews may be criticised for lacking the detail of the interviewees' perspectives.

The author reflected on the impact she and the team had in the interview situation in relation to the participants. The issues of status and authority were not felt to be an issue with the experts and senior OTs, as all of the interviewers presented themselves in their research capacity, which held no higher status than the interviewees. However, reflecting on some of the comments from the senior interviewees, for example 'you're making me feel bad now' or 'oh should I be using that?' there was an element of the senior OTs feeling judged about their practice at times. It was stated at the beginning of each of the interviews that this was not the case, and reassurance was given, and a relaxed approach was taken in these cases. However, it was evident that certain OTs felt judged and this may have impacted on their responses.

Chapter Eight: Conclusions

8.1. Introduction

The contribution of this study to research into home visits after stroke, and its implications for future research and clinical practice are now reported.

8.2. The contribution of this study to home visit after stroke research

This research has added to a previously limited body of qualitative literature reporting the value of home visits after stroke. The findings reveal a number of different purposes for which home visits are completed and the value these are perceived to have for patients after stroke. The findings are therefore important when considering the design of future home visit after stroke studies, both in terms of outcome measures and home visit intervention design.

The reported value of a home visit, when compared to a hospital assessment, was the opportunity provided to observe a patient completing ADL within the context of their home environment, which incorporated physical, social and cultural factors that were not as accurately captured in hospital. In essence, a home visit was felt to meet the specific needs of individual patients, which varied depending on the impact of the stroke, a patient's home environment and ADL that were meaningful to them. The precise focus of the home visit varied i.e. to minimise risks, improve independence in ADL, enable a better quality of life and support a patient in adjusting to life after stroke. However, the overarching value of the home visit remained its individualised and bespoke assessment.

Despite all three participant groups recognising and reporting the key value this intervention offers in terms of a holistic and patient-centred assessment, the participants did not feel that home visits were necessary and/or of value to all patients leaving hospital after stroke. This was heavily influenced by the cost of home visits and

the need to use OT resources judiciously. The findings however, did indicate that there were differing opinions as to the cost-effectiveness of such visits, hence the need for further investigation.

The pressure to use resources effectively, along with a reduced length of hospital stay, were reported to have altered home visiting practice, resulting in a less graded approach to discharge and a reduction in patient-centred practice. In view of this, the need for an evidence base for home visits is ever more pressing.

The findings indicate that home visits after stroke were perceived to be of most value to those patients who had a limited social network on their return home, and those with moderately severe disability, but not for those patients at an extreme level of severe disability or mild level of disability.

Perceptions, both within and across the three different participant group data sets, were mixed with regard to the value home visits offer to those patients with cognitive impairment. A graded discharge approach for patients with cognitive impairment was advocated to enable them to return home. The issue of patient capacity and patient choice were identified as important considerations here.

Perhaps of equal importance were the perceptions based around when home visits were seen as being of less value to patients. These perceptions related to both patient characteristics and the different focuses the home visit can take. Patient fatigue, level of cognitive impairment and whether patients were going into a nursing home were factors influencing whether a home visit was required or could have a negative outcome for patients.

The focus on risk management and/or equipment provision on home visits, were points of contention, reflecting the differing beliefs and approaches that can be taken on home visits.

8.3. The findings in relation to future research and implementation

Due to financial priorities, future research is likely to investigate the effectiveness of home visits in terms of reducing hospital lengths of stay and readmission. However, unless research investigates all of the potential values a home visit can offer, the longer term cost-effectiveness of this intervention in terms of adjustment, self-management and quality of life will be ignored. Each of these reasons for completing a home visit was identified as being of key value to patients returning home after stroke.

If future research neglects the investigation of the value of completing home visits for the purposes that have been identified in this study, it is likely that OTs will continue to complete home visits for their preferred purpose, as opposed to evidence based practice.

However, quantifying these values may prove difficult; for example, the measurement of adjustment is subjective. Also the findings indicated that completing home visits for different purposes, held different values for individual patients, further making it difficult to generalise the specific value of home visits after stroke.

A multicentre RCT would capture the influences of different working cultures, resource and practice, but there still remains the difficulty in objectively measuring the value of completing a home visit for each of the purposes raised by the participants in this study. The cohort study design was used in the HOVIS trial and may need to be considered in the future to enable research to capture 'real world' home visit practice.

The findings of this study indicate that future research investigating home visits after stroke should consider:

- Including patients who have cognitive impairment,
- Whether home visits after stroke have better outcomes for patients with certain characteristics,
- Identifying the cost-effectiveness of these visits not only in terms of falls and re-admissions but a patient's longer term ability to remain at home, a patient's quality of life, and adjustment to life after stroke,
- Designing interventions based on both OT and patient concerns that are raised on the home visit and allow sufficient time for patients to discuss the concerns that they have.

Addressing these issues would support implementation of future research findings as the outcomes of the research would relate to the 'real world' issues that patients and OTs face in stroke rehabilitation.

8.4. Clinical implications of the research

The findings indicated that there were potentially different priorities for experts, OTs and patients on a home visit, with OTs being more concerned about safety checks on a patient's return home. These findings highlight the importance of clinically reasoning whether visits are being completed to reassure the OT and, if so, whether alternative less expensive methods could be used to gather this information, as suggested by the experts and certain senior OTs.

The process of home visits was perceived to enable a patient to take control over decisions about returning home, which was an important finding. This encompassed the need for OTs to educate and provide relevant information to support patients to self-manage their life on their return home. This also involved joint decisions about the focus of the home visit. Self-management was perceived by the experts as a key development to consider in home visiting practice. Certain patients felt that they could manage well on their return home; for others this was not the case and the importance of empowering patients, particularly those who lived alone with a reduced social support, was evident.

Key implications for OTs:

- Alternative less costly methods of 'checking' that the home environment is ready for a patient's return home could be considered if the sole purpose of the visit is to reassure the OT about physical environmental related risks,
- OTs should plan the focus of the visit with their patients and carers,
- OTs should incorporate time for discussion about patient concerns on the home visit/whilst discharge planning and provide written information where required to support this discussion,
- OTs need to ensure patients are enabled to undertake the recommendations from the home visit, as this was identified to be a source of considerable frustration for patients on their return home,
- OTs should consider the characteristics of their patients and clinically reason why individual patients require a home visit.

Due to the multi-faceted impact of stroke, and patients' personal circumstances, the findings of this research highlight the difficulty in assigning patients into specific groups when determining the value of this practice. It would appear that, when making home visit decisions, a number of different factors impact on how valuable a visit was perceived to be. This is supported by a study undertaken by Whitehead (2013), which identified that a number of characteristics can impact on home visit decisions, but that certain influences may override other clinical decisions, for example patient and carer concerns/choice.

This research has highlighted that different clinicians and patients not only had differing opinions about the value of home visits after stroke, but also placed different values on the same purpose for completing home visits. This makes it difficult to define and measure the value of this practice which will require innovative research methods in future investigations.

This research has raised concerns about a change in home visit practice, with a perception that home visits have become less patient-centred. Before OTs are forced into changing their practice, future research must thoroughly investigate the complex and multiple values this intervention can offer as identified in this study. Without this research, practice will continue to be influenced by pragmatic factors and the perceived values home visits offer patients who have had a stroke will be neglected.

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Appendix A: The home visit essential criteria

Overview

In order to ensure that the patients taking part in the feasibility RCT of the HOVIS study were allocated to the two study groups in a systematic manner, the HOVIS team developed criteria for the home visit essential cohort.

Criteria were established for the 'home visit essential' cohort following preliminary work with the clinical staff in the stroke rehabilitation unit. The criteria aimed to include patients who needed a home visit before discharge, according to the occupational therapists who were working with them. The intention was that the occupational therapist, in collaboration with the multi-disciplinary team, would determine whether the patient should have a home visit according to the agreed criteria. All participants who did not meet the home visit essential criteria were eligible for entry into the randomised controlled trial and for randomisation to either receive a home visit or no home visit (hospital interview).

The home visit essential criteria were:

Patients which staff believed could not be assessed without a visit, for example:

Not independent transferring e.g. from bed to chair, from wheelchair to another chair.

Suitability of environment for safe use of new equipment such as walking aids, hoist and wheelchair access.

The criteria aimed to standardise the reasons for entering patients into the cohort, and to enhance the rigour of the research design.

Appendix B: Expert participant recruitment letter

Date:

Dear

RE: Home Visits after Stroke Study

We are currently conducting a study investigating occupational therapy pre-discharge home visits after stroke. I am writing to ask if you would be willing to participate in an interview as part of the research. It will cover your opinions on current and ideal home visiting practice and your perception on the purpose of home visits.

We are planning to interview experts within this field, as part of the research. We would like to ask you to be one of our expert informants. If you agree to take part, a member of the research team will conduct an interview with you. This will be arranged at a time and location that is convenient for you. It could be a telephone interview if you prefer.

The interview will last for approximately 45 minutes and will be audio recorded with your consent.

The main aim of gathering this information is to inform the design of a second stage of our research which will be a survey with senior occupational therapists. It is intended that the results of the research will be published formally in scientific journals and in patient newsletters. You will not be identified in any report or publication.

A member of the research team will contact you by phone within two weeks of the date of this letter to confirm whether you are willing to take part. However if you would like any further information before this time, please feel free to contact me.

Yours sincerely

Dr Avril Drummond
Associate Professor in Rehabilitation

Appendix C: Senior OT recruitment letter

27th July 2010

Dear Specialist Section Member

RE: HOVIS (Home Visits after Stroke): a feasibility study of pre-discharge occupational therapy home visits after stroke.

We are currently conducting a study investigating occupational therapy pre discharge home visits after stroke. I am writing to ask for senior occupational therapists working within this field to volunteer to participate in an interview about home visits.

If you agree to take part in this study, a member of the research team will conduct a telephone interview with you, arranged at a time that is convenient for you. The interview would last for approximately 30 minutes and with your permission, would be tape recorded. The interview will cover areas such as general home visiting procedures and ask you about patients who receive a home visit. Identifying details of individual patients will not be required. All information you provide will be kept confidential and neither you or your place of work will be identified.

The main aim of gathering this information will be to identify and describe current practice in occupational therapy pre discharge home visits after stroke. If you take part in this research we will send you a certificate to acknowledge your participation in the HOVIS research study. If you wish to be identified in the research, you have the option of having your name in the acknowledgements of the final paper.

If you wish to participate in this research or discuss the research further, please contact a member of the research team; Phillip Whitehead or Karen Fellows, (contact details listed below).

Karen Fellows: Karen.fellows@nottingham.ac.uk

Phillip Whitehead: Phillip.j.whitehead@nottingham.ac.uk

Telephone: 0115 8231458

Yours sincerely

Dr Avril Drummond
Associate Professor in Rehabilitation

Appendix D: Patient participant information sheet

Home Visits after Stroke

Patient Interview Information Sheet

As part of the Home Visit after Stroke (HOVIS) study you have agreed to take part in, we are asking a small number of patients if they would like to participate in a short interview about their experience of having a pre-discharge occupational therapy home visit. This is part of a sub-study to the HOVIS trial.

What is the purpose of the interview?

In addition to the information we are collecting in the HOVIS study, we would like to find out what patients' think about home visits in more detail. We are carrying out interviews to collect this information. This will add to the main findings in the HOVIS study.

Why have I been invited to take part?

You have been invited because you have agreed to take part in the Home Visit after Stroke study and will be having a pre-discharge occupational therapy home visit.

What will happen to me if I take part?

If you choose to take part all your normal rehabilitation and care will continue and you will receive a home visit prior to returning home. In addition, the research occupational therapist (Karen Fellows) will see you a week after you have returned home, either at your one week follow-up visit or at a time that is convenient for you.

Karen will talk to you for about 20-30 minutes and ask questions about what your home visit involved and how you felt about it.

Do I have to take part?

It is up to you to decide whether to take part in the interview. You have some time to think about it. The research occupational therapist, Karen Fellows will contact you within two days of receiving this information sheet, to ask if you would like to participate in the interview. Karen will also be able to answer any further questions that you may have. If you do decide to take part, you will be given this sheet to keep, and asked to sign a consent form. Even if you give your consent, you can withdraw from the interview at any time, without giving a reason. This will not affect the care you receive.

You will still receive the care normally available even if you decide not to take part in the interview.

What will I have to do if I want to take part?

If you decide to take part in the interview you do not have to do anything – Karen will contact you on the ward to ask whether you want to take part.

What are the potential benefits of taking part?

There may be no direct benefit to you. However the information we get from you will help the research team to have a better understanding of the value home visits have to patients, which in turn will help to put the findings of the study into context with patient experiences, views and opinions.

Are there any problems with the study?

Those patients', who are unable to communicate their views verbally, will be excluded from this part of the study, due to the data collection method and analysis process. At present it is not possible to include non-English speakers, as this is a pilot study.

Will it cost me anything to take part?

It will not cost you anything to take part.

Will my taking part in the study be kept confidential?

Yes. We will follow established ethical and legal practices and all information about you will be handled confidentially. All information which is collected about you during the course of the study will be kept strictly confidential and any information about you will have your name and address removed so you cannot be identified.

Karen will ask your permission to record and type up (transcribe) the interview for analysis purposes. The recordings would be stored in a secure data base only accessible to authorised individuals from the University of Nottingham, the research group and regulatory authorities. All typed information would be anonymised. The findings will be reported in writing and although what you have said in the interview may be quoted directly, your identity will remain anonymous. If you wish to say something off the record, you can inform Karen and this information will not be transcribed, analysed or reported.

Will the research team have access to my medical details?

Yes with your consent. The research team will need to collect basic information about you from the medical notes, such as your date of birth. This information will only be collected once you have consented and will be held in line with the Trust's confidentiality policy.

What will happen if I don't want to carry on with the interview?

Your participation is voluntary and you are free to withdraw at any time, without giving any reason, and without your legal rights being affected. If you withdraw then the information collected so far cannot be erased and this information may still be used in the project analysis. You will continue to receive treatment as normal from the Stroke Rehab Unit.

Please note this is a sub-study to the HOVIS trial and if you choose to withdraw from the interview you can still continue to take part in the trial. You can also continue with the interview but not the trial.

What if there is a problem?

If you have any concerns about the interview you are encouraged to speak to a member of the research team and they will do their best to answer your questions. You can also contact the principal investigator, Dr Avril Drummond. If you remain unhappy and wish to complain formally you can do this through the NHS complaints procedure. The contact details are given at the end of this document.

What will happen to the results of the research?

It is intended that the results of the research will be published formally in scientific journals and published in patient newsletters. Part of this study will be written up as an educational qualification. You will not be identified in any report or publication.

Who is organising and funding the research?

The research is being organised by The University of Nottingham and CLAHRC NDL (Collaboration for Leadership in Applied Health Research and Care Nottinghamshire, Derbyshire and Lincolnshire), with support of Derby Hospitals NHS Foundation Trust. CLAHRC NDL is funded by *The National Institute for Health Research*.

There is a steering group that meets regularly to advise the research team. The group includes experienced research therapists, a stroke patient representative and a member of the Stroke Rehabilitation Unit multi-disciplinary team.

Who has given permission for the study to be carried out?

All research in the NHS is looked at by an independent group of people, called the Research Ethics Committee to protect your safety, rights wellbeing and dignity. This study has been reviewed and given favourable opinion by Berkshire Research Ethics Committee.

Further information and contact details for the study:

Karen Fellows, Research Occupational Therapist. University of Nottingham

Division of Rehabilitation and Ageing, B Floor, Medical School, Queens Medical Centre, Nottingham, NG7 2UH Tel: 01332 788778 / 0115 8231458

karen.fellows@nottingham.ac.uk

Karen will also be present on the ward during the week if you wish to talk to her.

Dr Avril Drummond, Chief Investigator.

Division of Rehabilitation and Ageing, B Floor, Medical School, Queens Medical Centre, Nottingham, NG7 2UH. Tel: (0115) 8230226

Email: avril.drummond@nottingham.ac.uk

NHS complaints procedure

Patient Advice and Liaison Service (PALS) –Royal Derby Hospital

Utttoxeter Road

Mobile: 08007837691

DE1 2QY Derby

Phone: 01332 785156

Out of hours 24 hour phone service text facility 07799337717

NHS direct: 0845 4647

Thank you for taking the time to read

Appendix E: Patient participant consent forms

Consent form

Home Visits after Stroke: Patient Interview Sub-study

REC ref: 10/H0505/41

Name of Researcher:

Name of Participant:

Please initial box

1. I confirm that I have read and understand the patient interview information sheet, final version one dated 15/06/11 for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without my medical care or legal rights being affected. I understand that should I withdraw then the information collected so far cannot be erased and that this information may still be used in the project analysis. ☐
3. I understand that relevant sections of my medical notes and data collected in the study may be looked at by authorised individuals from the University of Nottingham, the research group and regulatory authorities where it is relevant to my taking part in this interview. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this interview. I understand that my personal details will be kept confidential. ☐
4. I understand that the interview will be recorded and that anonymous direct quotes from the interview may be used in the study reports ☐
5. I agree to take part in the interview. ☐

Name of Participant

Date

Signature

Name of Person taking consent

Date

Signature (if different from Principal Investigator)

Appendix F: Expert participant topic guide

HOVIS Study – Topic guide for interviews with key informants:

CP07/07/10

Introduction

Introduce self. 'We are identifying and documenting current practice of pre-discharge occupational therapy home visits for people who have had a stroke, and as such we are interviewing experts in order to get their views on the purpose and value of these home visits. I would like to audio record the interview if that is ok with you? [turn on recorder] Any information you share with us will be anonymised in later reports and/or publications. If you would like to say anything 'off the record' please let me know and the information will not be quoted or referred to in future'.

Consent: Could you please state your name and consent to be interviewed for the tape.

Topic areas:

- 1) Could you start by introducing yourself and your role?
- 2) Could you tell me briefly about your experience of occupational therapy pre-discharge home visits for people who have had a stroke?
- 3) Could you tell me what you think is involved in current home visit practice for people who have had a stroke?
 - What is the content of visits? / 'What happens on a visit?'
 - Who is involved?
 - How long do they take?
 - When are they done?
 - What resources do they require?
- 4) What is the purpose of doing pre-discharge home visits for people who have had a stroke?

- Why are they done? Why is it important that they are done? Should they be done at all?
 - What are the effects/benefits of undertaking pre discharge home visits? What is their value?
- 5) Could you tell me what happens with the information that is collected on the pre discharge home visit?
- How is the report/information used?
 - How are issues followed up or passed on to the relevant people?
- 6) Do you think there are there any disadvantages to undertaking pre discharge home visits for people who have had a stroke?
- 7) In an ideal world, of the people who have had a stroke, which ones do you think should be given a pre-discharge home visit, and when?
- 8) How do you think OTs decide which stroke patients get given a pre-discharge home visit?
- 9) How would you change or improve home visiting practice for people who had had a stroke?
- 10) How receptive do you think multi-disciplinary teams would be to making changes to home visit practice for people who have had a stroke?
- 11) What barriers are there to making changes to home visit practice for people who have had a stroke? What would help change to happen?

Appendix G: Senior OT participant topic Guide

HOVIS Study – Topic guide for telephone interviews with senior Occupational Therapists KF10/01/11

Introduction

We are undertaking these interviews because our study is very interested in Occupational Therapists' decision making processes about which people who have had a stroke are offered a pre-discharge home visit, and which are not. We are also interested in OTs descriptions of what pre-discharge home visits involve in practice. The intention of this interview is not to judge or check your decision making or the quality of care you provide, rather we are interested in how and why it is decided that certain patients require a pre-discharge home visit, and others do not. If you would like to say anything 'off the record' please let me know and the information will not be quoted or referred to in future'.

Consent

I would like to audio record the interview – is that ok? [Turn on recorder] Could you please give your name and consent to be interviewed for the recorder?

Topic areas

- 1) Could you start by briefly introducing yourself and telling me a bit about the service you work in?
 - How many patients are on the ward/in the unit? What is the average length of stay?
 - How many OTs are in the team? What range of grades?
- 2) How many stroke patients do you currently have on your caseload?
- 3) Could you tell me about the purpose of doing pre-discharge home visits for people who have had a stroke?

- Why are they done? Why is it important that they are done? Should they be done at all?
 - What are the effects/benefits of undertaking home visits for people who have had a stroke? What is their value?
 - Are there any disadvantages to undertaking pre-discharge home visits for people who have had a stroke
- 4) Could you broadly tell me about what they involve/the content of the visit?
- How long do they take?
 - Who goes on these visits and why?
 - Do you use checklists? Which ones?
 -
- 5) How commonly do you undertake either discharge and/or access visits? Why are/would these types of visits completed?
- 6) Could you tell me what happens with the information that is collected on the pre discharge home visit?
- How is the report/information used?
 - How are issues followed up or passed on to the relevant people?
- 7) Could you tell me about a stroke patient on your caseload that you would do a pre-discharge home visit for, one you wouldn't and one you are not sure about?
- Could you talk me through how and why you came to that particular decision for each of those patients, and what their home visit will involve?
 - When in their patient journey did it become clear whether they required a home visit or not?
- 8) Do you complete pre-discharge home visits for patients going into a nursing home? Could you tell me what that would involve

- 9) Who makes the decision to undertake a pre-discharge home visit for a patient who has had a stroke?
- The Occupational Therapist? Physiotherapist? Consultant? Patient & family?
- 10) Is there a memorable pre-discharge home visit for a person who has had a stroke that you were involved in that you could tell me about?
- 11) Have you ever done a home visit for a stroke patient where you got there and it was not essential?
- 12) Do you think there are ways in which pre-discharge home visits for people who have had a stroke could be improved?
- are there ways in which things could be done differently?
- 13) Are there ways in which information about the patient's home environment could be collected differently?
- 14) Have there been any new ways of doing things/changes to the way in which pre-discharge home visits for people who have had a stroke are done?
- Changes put in place by you or your team? How successful have they been?
 - Changes imposed on the team? Why?
 - Have changes been attempted that were not successful? What happened?
- 15) Is there anything else you would like to say about pre-discharge home visits for stroke patients?
- 16) Is there anything you would like to ask me?

Thanks and end

Appendix H: Patient Participant Topic Guide

HOVIS Study – Topic guide for face to face interviews with patients recruited to the HOVIS study 10/07/11

Introduction

We are undertaking these interviews because we are very interested in patient views and experiences of having a pre-discharge home visit, after a stroke. This will add to the main findings of a bigger study (HOVIS study). If you would like to say anything 'off the record' please let me know and the information will not be quoted or referred to in future'.

Consent

I would like to audio record the interview – is that ok? [Turn on recorder] Could you please give your name and consent to be interviewed for the recorder?

Topic areas

- 1) Do you remember having a home visit with your occupational therapists from the stroke rehab unit prior to being discharged from hospital?

-Your OT was called...

-You will have been brought home for about an hour or so

- 2) Can you tell me about the home visit you had with the occupational therapist before you were discharged from the stroke rehabilitation unit?

-what did you do on the visit?

-was any equipment left? (if so how have you been managing to use this?)

-how did you feel about the visit before, during and after the visit?

- 3) Were there any positive aspects to the visit? (Did you enjoy any aspects or feel good about any aspects?)

-If so can you tell me about these? why do you feel this was a good experience?

- 4) Were there any negative aspects to the visit? (Did you feel bad about any aspects or feel anxious or upset?)

-Can you tell me about these? why did you feel they were negative?

5) Would you choose to have a home visit?

- Can you tell me why you would/wouldn't choose to have a home visit?

6) Were you given the choice whether you had a home visit on the stroke rehabilitation unit?

-Was the visit discussed with you and your family prior to having the visit?

-Did/would you find this useful or not? Can you explain why/why not?

7) Are there any ways in which you feel pre-discharge home visits for patients who have had a stroke could be improved? Please tell me about this

8) Is there anything else you would like to say about your pre-discharge home visit after stroke or this subject?

Appendices I, J and K: Audit trails of thematic analysis

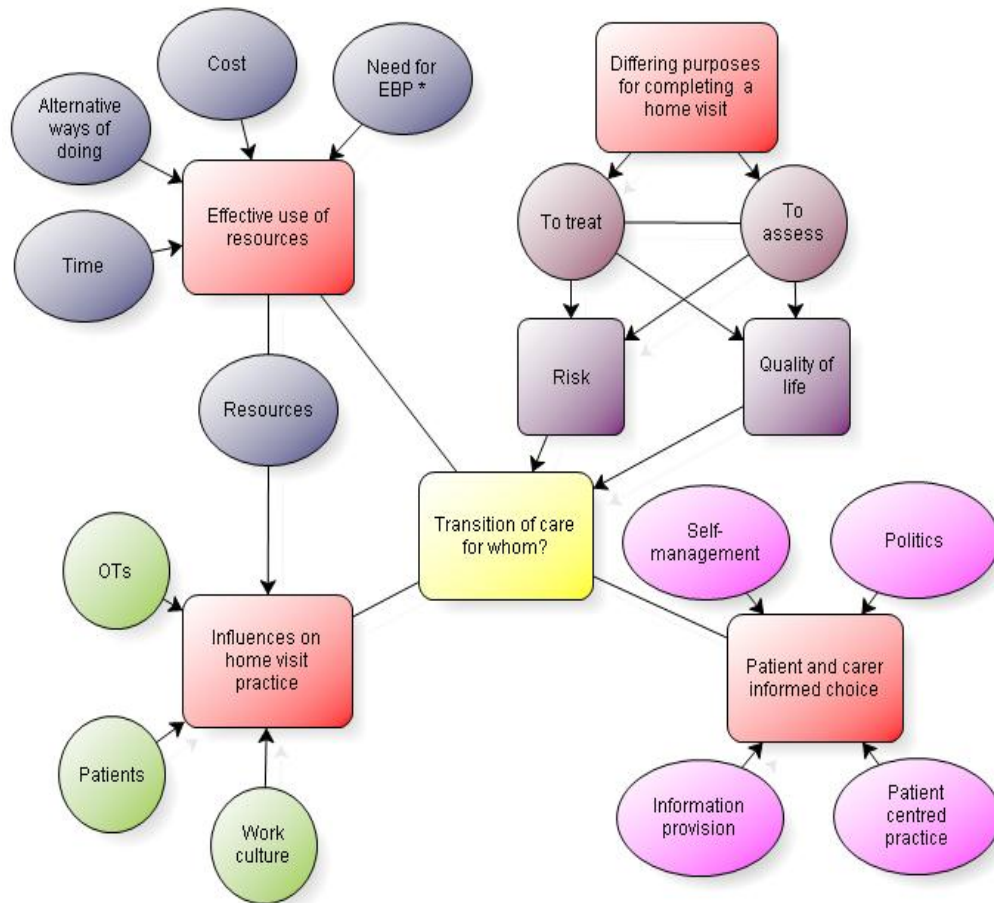
Overview

The nature of this research was to explore and make sense of the participants' perceptions and generate theory as to the value of home visits after stroke. To ensure research rigour a transparent description of the analysis process was produced as the analysis took place. Here an audit trail of the analysis processes for interview data generated with each of the participant groups, after the initial coding phase, is provided. This is included to enable the reader to understand how the analysis developed. The author decided to include this level of description in response to qualitative analysis often being criticised for poorly described analysis processes. The use of an audit trail provides a thick description of the analytical processes (Carcary, 2009).

Appendix I: Expert participants' thematic analysis audit trail

Following initial familiarisation with the expert data (Stage one of thematic analysis as described by Braun and Clark, 2006), whereby the interview recordings were listened to and the transcripts were read, the second phase of coding the data took place. Sixty-one codes were identified during the coding process. Each code was written down and mapped visually to enable meaningful patterns of data to be searched for in response to the research question: what is the value of a pre-discharge home visit for a patient who has had a stroke? Four initial themes developed: i) Effective use of resources, ii) Differing purposes for completing a home visit, iii) Influences on home visit practice and iv) Patient and carer informed choice.

Figure 1: Expert participation analysis initial themes



* Evidenced based practice

The experts reported that home visits, although of value to certain patients, were not necessary for all, hence the consideration of 'who' they were of most value to. This opinion was heavily influenced by the need to use resources effectively and the perceived cost of these visits, hence the development of the 'Effective use of resources' theme. This desire to use resources effectively was perceived to have resulted in a change in practice, with the experts reporting that fewer home visits were being completed when compared to previous practice.

Alternative methods of completing home visits, when a home visit was not deemed necessary were suggested by the experts, e.g. consideration of cheaper ways of obtaining the same information that a pre-discharge home visit would provide.

At this phase 'Different purposes for completing a home visit' developed as an initial theme to reflect different reasons why a home visit was completed, i.e. to assess the patient and/or to treat their difficulties, with a focus on risk management and or/quality of life issues. The experts described how the content of a home visit reflected who benefited most in the transfer of care from hospital to home, the OT, the wider multi-disciplinary team, the hospital organisation, or the patient and their families. There was a concern that risk management was being completed to alleviate OT fears about patient safety, as opposed to being of prime value to the patient. The following question was asked: who benefits from a home visit and who was being supported in the discharge process, the OT, the patient, or both? This is highlighted in the diagram under the central theme 'Transition of care for whom?'

Once the initial themes had developed, reviewing and refinement started to take place (phase four as described by Braun and Clark, 2006). This process of refinement included checking that no relevant data has been missed and that the themes accurately answered the research question. This stage of analysis was twofold, firstly checking if the themes worked in relation to the coded extracts, and secondly the entire data set generated a thematic 'map' of the analysis (Braun and Clark, 2006: 91).

At this point it was evident that certain initial themes that had developed were either too diverse and could be separated into smaller themes, or they did not have enough data to support them, and were either disregarded, or incorporated with other themes.

Following ongoing analysis of the 'Influences on home visit practice' theme, it was identified that each of the stakeholder groups: the OT, the wider MDT, the hospital

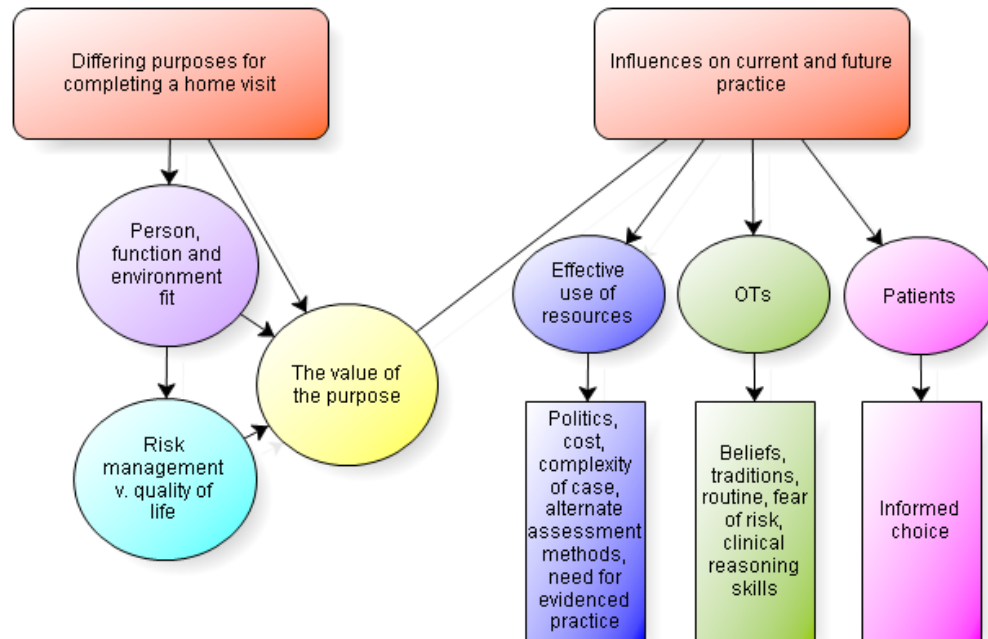
organisation, and the patient and their families, could mutually benefit from the value of a home visit. For example, although there were concerns about risk adverse practice from OTs, the experts also believed that home visits could prevent falls and hospital readmissions, which has equal value for the patient and also the hospital organisation along with the OT. Hence, the 'Transition of care for whom?' theme was disregarded and its components formed parts of other themes.

During the refining stage of analysis, when the original research question was returned to, the theme 'Differing purposes for completing a home visit' was developed to incorporate the 'Person, function and environment fit' theme and 'Risk management versus quality of life'. The value of completing a home visit for each of the stated purposes: to minimise risks to patients, enhance independence in ADL, and improve a patient's quality of life, was identified to link back to the visits capability to determine the 'Person, function and environment fit'.

The experts perceived the overarching value of home visits after stroke was the identification of a patient's ability to perform functional tasks within their home environment. However, the focus of this 'fit' varied depending on the specific purpose of the home visit. Therefore, this theme draw a comparison between the values a home visit can offer to an individual's 'quality of life', and the 'management of risks' at home, which formed part of this theme.

The author ascertained that the findings represented what the research had aimed to explore. The outcomes of the developing themes were fed back to the HOVIS team, allowing for further reflection and refining of the themes.

Figure 2: Expert participant analysis refined themes



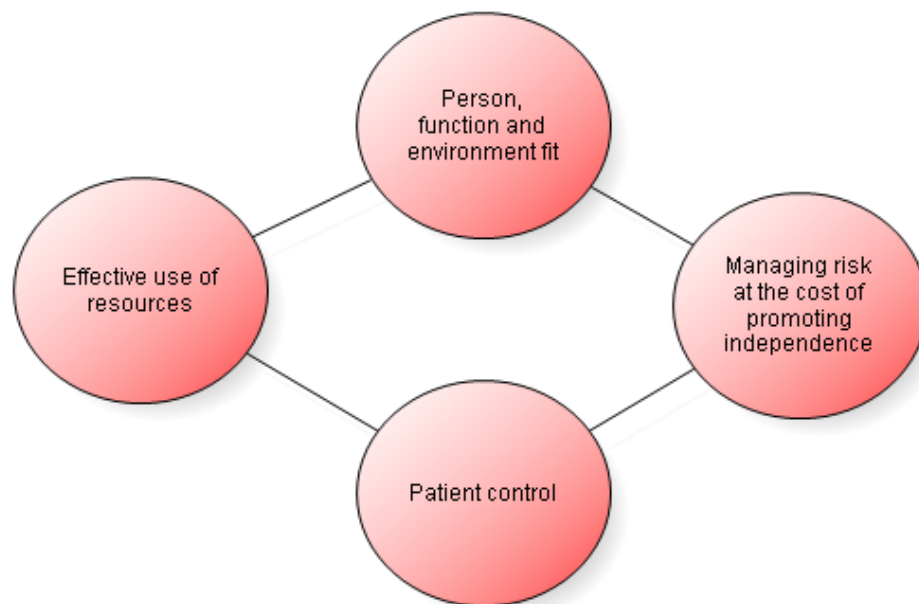
In the final phases of analysis the themes were defined on the essence of what each of the themes meant, and how the findings added to the theoretical basis for the value of home visits after stroke was reported (Phases five and six of thematic analysis as described by Braun and Clark, 2006).

It was during these final phases that the theme ‘Influences on home visiting practice’ (OTs’ beliefs and risk adverse practice), was combined with ‘Risk management v. quality of life’, due to the overlaps in the essence of these themes.

Whilst writing up the findings, it was reflected that the experts perceived that, by providing patients with more control about what happens during a visit, and considering a patient’s hopes and/or concerns for the future (previously highlighted as potential influences on practice), patients were able to take control over the management of their condition. This, in turn, prevented them from becoming anxious about the outcome of a home visit, hence the development of the ‘Patient control

theme'. The anxieties a patient was reported to face, were perceived to be as a result of lack of control about their discharge destination and what might happen to them as a result of 'failing' the home assessment. Therefore this finding formed part of the 'patient control theme'. Figure 3 illustrates the defined themes:

Figure 3: Expert participant defined themes

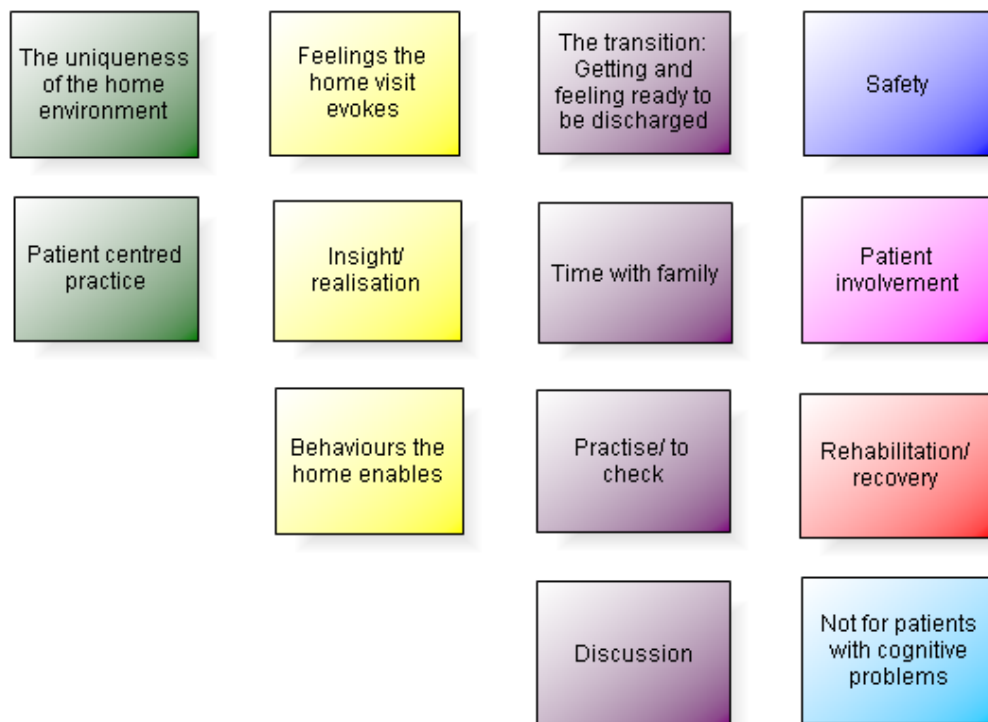


Appendix J: Senior OT thematic analysis audit trail

Following initial familiarisation with all of the data, the data that specifically related to the value of having a home visit after stroke, was coded separately, as explained in chapter three. One-hundred and sixty codes were developed. Following further analysis, and the identification of patterns in the codes through use of a visual map, thirteen initial themes were developed.

Figure 4: Senior OT analysis initial themes

Note: Themes of the same colour were themes that linked together



Whilst forming initial themes (phase two of thematic analysis, (Braun and Clarke, 2006)) not all of the codes were felt to form themes that specifically related to the value of home visits for patients. For example, the senior OTs referred to the value of home visits for patients' spouses or relatives, but that was not the focus of this research

question. These codes were not disregarded at this point as it was felt with ongoing interpretation they may form part of a developing patterned response.

It was evident that the senior OTs perceived home visits to be a unique opportunity to assess a patient's needs on their return home, and that they offered more in terms of a holistic assessment of a patient's needs when compared to a hospital assessment.

When reviewing the initial themes overlaps between the meanings of the themes were identified. For example, 'Feelings the home visit evokes' and 'Behaviours', described how a patient reacts during 'The transition to returning home' and there were descriptions of how the home visit supported the patient to 'Adjust to life after stroke'. Following repeated questioning of the value to the patient, this theme grew to incorporate confidence, mood, anxiety and emotional processes, which were all felt to relate to a patient adjusting emotionally and psychologically to life after stroke.

The rehabilitation/recovery theme included a wide range of approaches to rehabilitation. On further review, it was felt that the senior OTs had different views in terms of the approach to rehabilitation taken on a home visit, and the theme 'Recovery: not just equipment provision' developed to reflect these different approaches.

At this point, the themes were presented to the HOVIS group. One of the team members was unsure as to whether 'Recovery: not just equipment provision' could be represented as a theme in its own right, as equipment provision was a more prevalent patterned response, when compared to the narrative that questioned the value of only providing equipment on home visits. The author explained that, although this was the case, the strong beliefs expressed in a minority of the senior OTs could not be ignored, and that thematic analysis did not aim to develop themes based on the highest number of responses, but those that were of interest and responded to the research question.

However, it was reflected that the way in which the theme was presented, could have lead the reader to believe that there was an emphasis in the senior OTs' perceptions, that the home visit should not only be focusing on equipment provision, and this was not the case. Therefore, two separate themes were created to reflect these differing values: 'Compensation' through use of equipment and 'Recovery'.

During the review process, the narrative that formed the adjustment theme was found to overlap with the 'Recovery' and 'Compensation' themes. For example, when discussing patients who practised tasks on the home visit, certain quotations seemed to support both recovery and adjustment. Where this occurred, the author had to consider what she interpreted as the essence of the value of the experience for the patient. The individual quotations were reviewed and it was decided that although there were overlaps, there were distinct differences in the meanings in what the senior OTs were saying about recovery and adjustment. 'Recovery' was interpreted to refer to a patient regaining their functional abilities and 'Adjustment' referred to the process a patient goes through in adapting to their life after stroke, which may include limitations and achievements in their recovery, but was not exclusive to this.

As part of the reviewing/refining process the author presented the themes to a colleague on the HOVIS team and as a result two further analysis issues were raised. Firstly, the uniquely tailored nature of the home visit, as described by the senior OTs, was found to underpin its value in terms of 'Rehabilitation', 'Compensation' and 'Adjustment' and therefore, formed an overarching theme of 'Bespoke rehabilitation'. It was also identified that the senior OTs not only talked about the bespoke nature of the home visit in terms of rehabilitation, but also a patient's safety; explaining how, in certain situations, if a home visit hadn't been completed, a patient would have been discharged home unsafely. Therefore, a 'Bespoke intervention' theme was formed as an overarching theme, with 'Rehabilitation' and 'Assessing safety issues' becoming two

sub themes. 'Recovery', 'Compensation' and 'Adjustment' came together to form the rehabilitation sub theme.

Secondly, whether the home visit's ability to enable a patient to compensate for their disability had the same meaning as completing a visit to ensure patient safety was considered. Although there was an overlap in the meanings, compensating for disability did not solely relate to safety, it also related to independence in functional tasks. It was also decided that, because these two sub-themes had been predominant across the data sets and did not have exactly the same meanings, they should be reported on as two separate themes, but their associations stated. An extract from the author's reflections demonstrates this thought process:

"Is this not compensation why is this different? I think its saying OTs use equipment and adapt the environment to help make patients safe ... there is an overlap but in the compensatory part it's not just about safety... the participants also describe functional independence".

At this stage, those codes that initially did not fit into the developing themes were reviewed and either disregarded, because they did not relate to the research question, or merged to form part of another theme. For example, the 'Procedural report' code, which referred to the procedural nature in which senior OTs would report their home visit, although interesting, did not relate to the value of the home visit for the patient, and was therefore disregarded at this point.

All of the transcripts were re-read, which enabled the identification of the most appropriate quotations to be used to best describe the meaning of the themes, and also to check if anything had been missed. The 'support' a patient required on discharge from care agencies and ongoing rehabilitation schemes, was something that the home visit was reported to address, but had not been specifically discussed in the

senior OT analysis at earlier phases. Following further interpretation, it was identified that patients could overcome functional difficulties in three different ways as a result of a home visit, and the theme 'Overcoming functional problems' was developed, combining three smaller sub- themes of 'Home modifications' (originally Compensation), 'Recovery' and 'Support'.

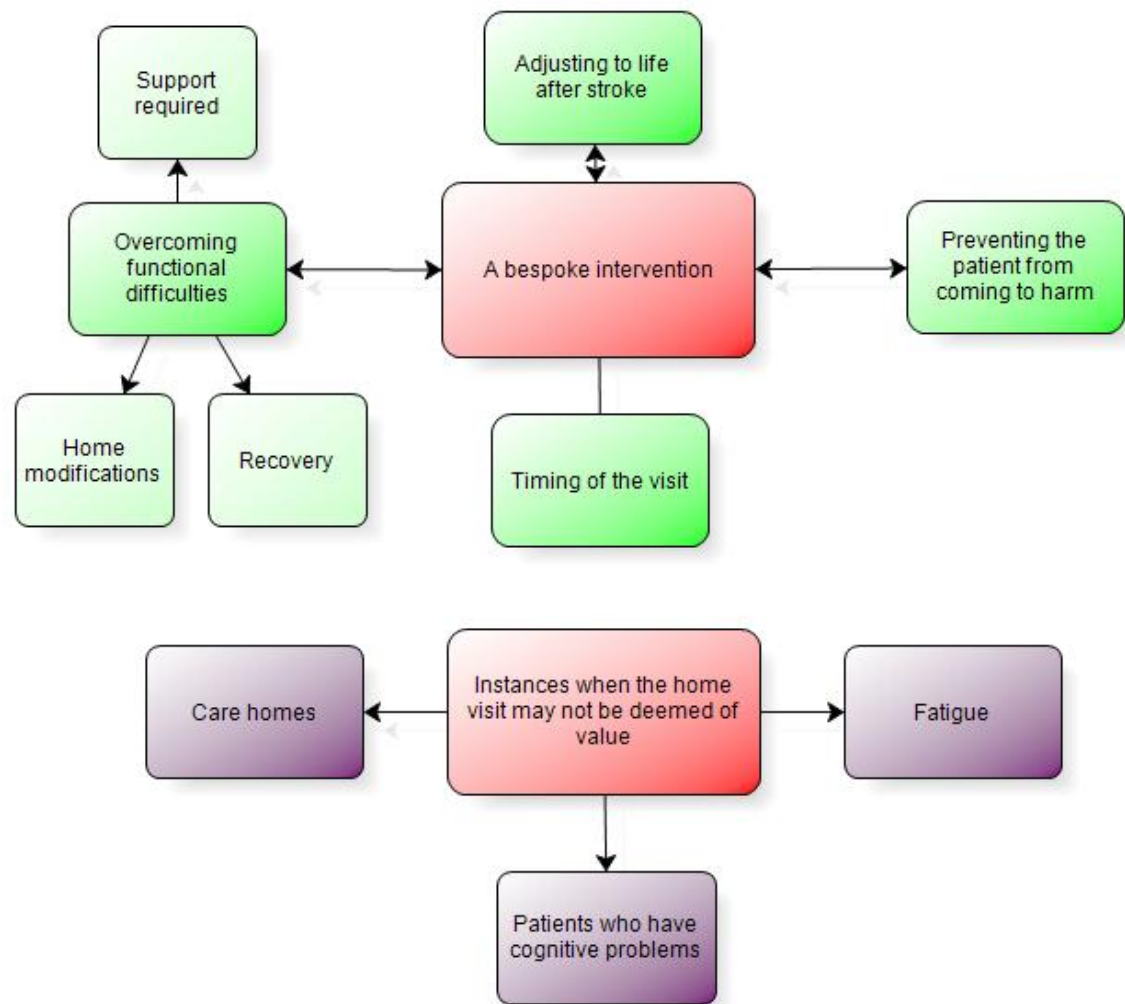
During this phase of analysis, it was also identified that the senior OTs described experiences to illustrate situations of when a home visit may not be of value to patients. These were areas that had been identified previously and discussed within the developing themes as counter opinions and perceptions. However, at this point it was felt in order to explain the meaning of these perceptions, they should be separated from the other research findings. Therefore, the 'Instances that may reduce the value of the pre-discharge home visit' was formed and included 'Patient fatigue', 'Patients who have cognitive impairment' and 'Patients going to a care home on discharge'.

One further patterned response was identified at this stage of analysis: 'the timing of the home visit'. Initially the timing of the visit was felt to inter-relate with the themes that discussed the differing values a home visit can provide, as it appeared that the timing of the visit had an impact on its content. However, following further refining of the themes, it was identified that the senior OTs described differing perceptions of when a home visit should be completed and, although this related to the purpose of the visit, it was felt an important issue to highlight in its own right.

The author presented these findings to a colleague, who was an experienced qualitative researcher, but who was not part of the HOVIS team, in order to reflect on her analytical process and rigour, and talk through the meaning of the themes developed. The author particularly wanted to gain feedback on the themes that had elements of overlap and the themes that had developed as a result of further refining. Positive feedback was received about the process taken to analysis and it was felt, as a

clear explanation of how the interpretations had developed, the overlaps were acceptable, but needed to be recognised and, why these themes weren't combined, should be stated.

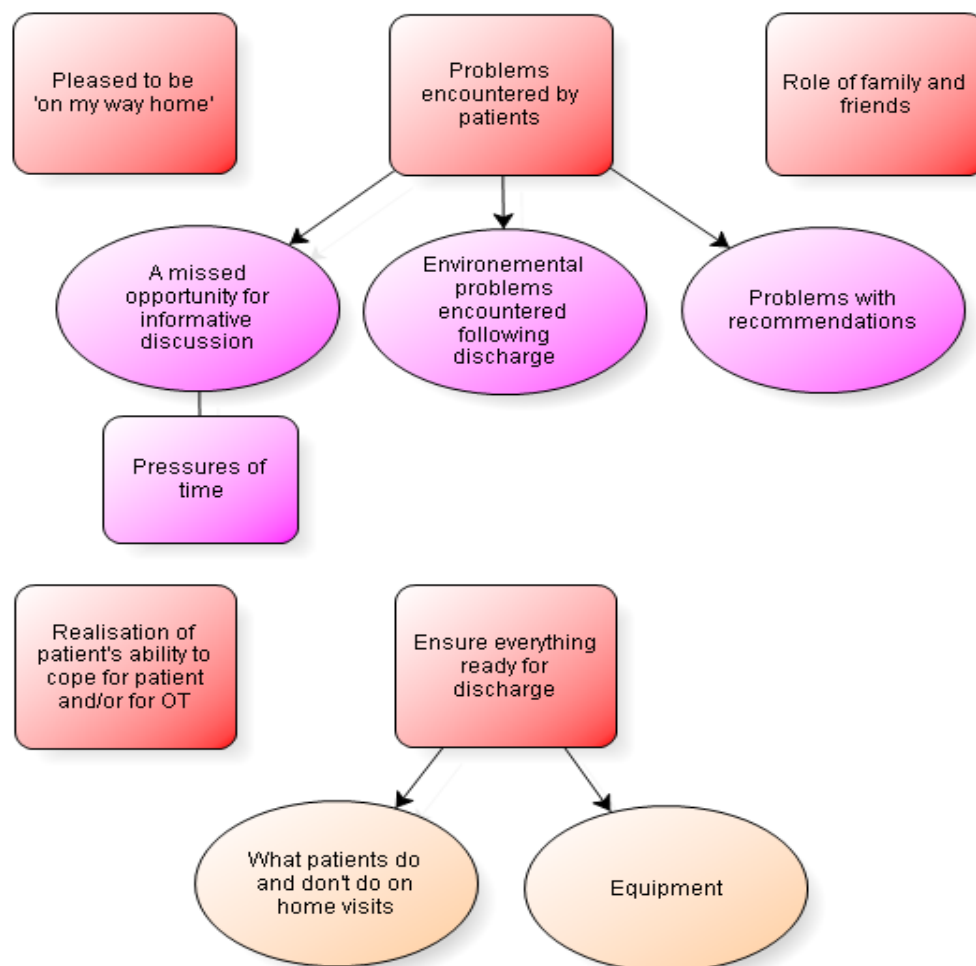
Figure 5: Senior OT analysis defined themes



Appendix K: The patient participant analysis audit trail

Following familiarisation of the data, initial coding took place, whereby any data relating to the value of home visits after stroke was given a code. Responses from relatives, who were present during the interviews, were also coded at this stage to enable an overall impression of the data, but direct quotations were not used in the reporting stage. One hundred and two codes were generated. Each code was written down, and any codes that had the same or similar meaning were placed together; this provided a visual image of the developing themes. At this stage, 11 initial themes were developed from the codes.

Figure 6: Patient participant initial themes

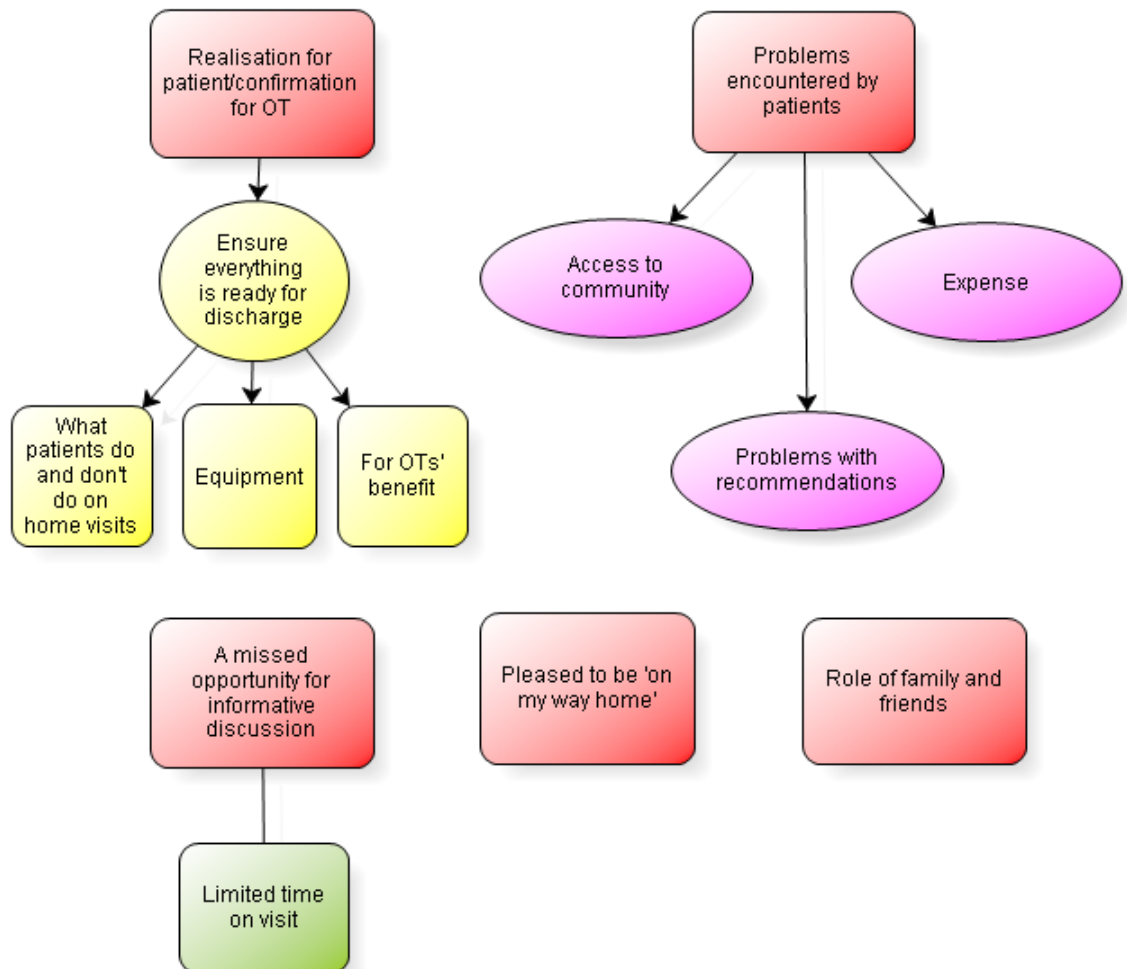


It was evident from the interview data that the patients had found the home visit an enjoyable experience and that they were 'Pleased to be returning home', but they did also talk about problems that they had encountered since their return home. At this stage, these problems formed the theme 'Problems encountered by patients'. It was also evident that there was a perceived lack of time to complete the home visit and the theme 'Time pressures' was developed. Another developing pattern of codes from the initial findings related to the difference in what patients actually did in terms of activities of daily living (ADL) practise on the home visit, with some patients reporting that they had done very little activity on their visit. The author at this point had to acknowledge her pre-conceptions in relation to this, as when patients reported they had 'just sat' during the home visit, she had felt this to be negative, in view of what could have been achieved. It was however acknowledged that the patient participants had not expressed this as negative, and therefore in the ongoing interpretation of this data, the author was careful not to influence the findings from her own perceptions, but those of the patients.

The initial themes were further developed and it was felt that the 'Problems encountered by patients' encompassed a number of the other initial themes i.e. problems with recommendations, problems with the environment, lack of time and the importance of discussion, which included a 'Missed opportunity for informative discussion'.

During further analysis, the meaning of the theme 'Reality of the patient's ability to cope for patient and/OT' developed and incorporated 'Everything is ready for discharge', 'What happens on the visit?', 'Equipment' and the 'Benefits for the OT'; therefore, these themes became part of the 'Realisation for the patient and/or the OT' theme.

Figure 7: Development of patient participant initial themes



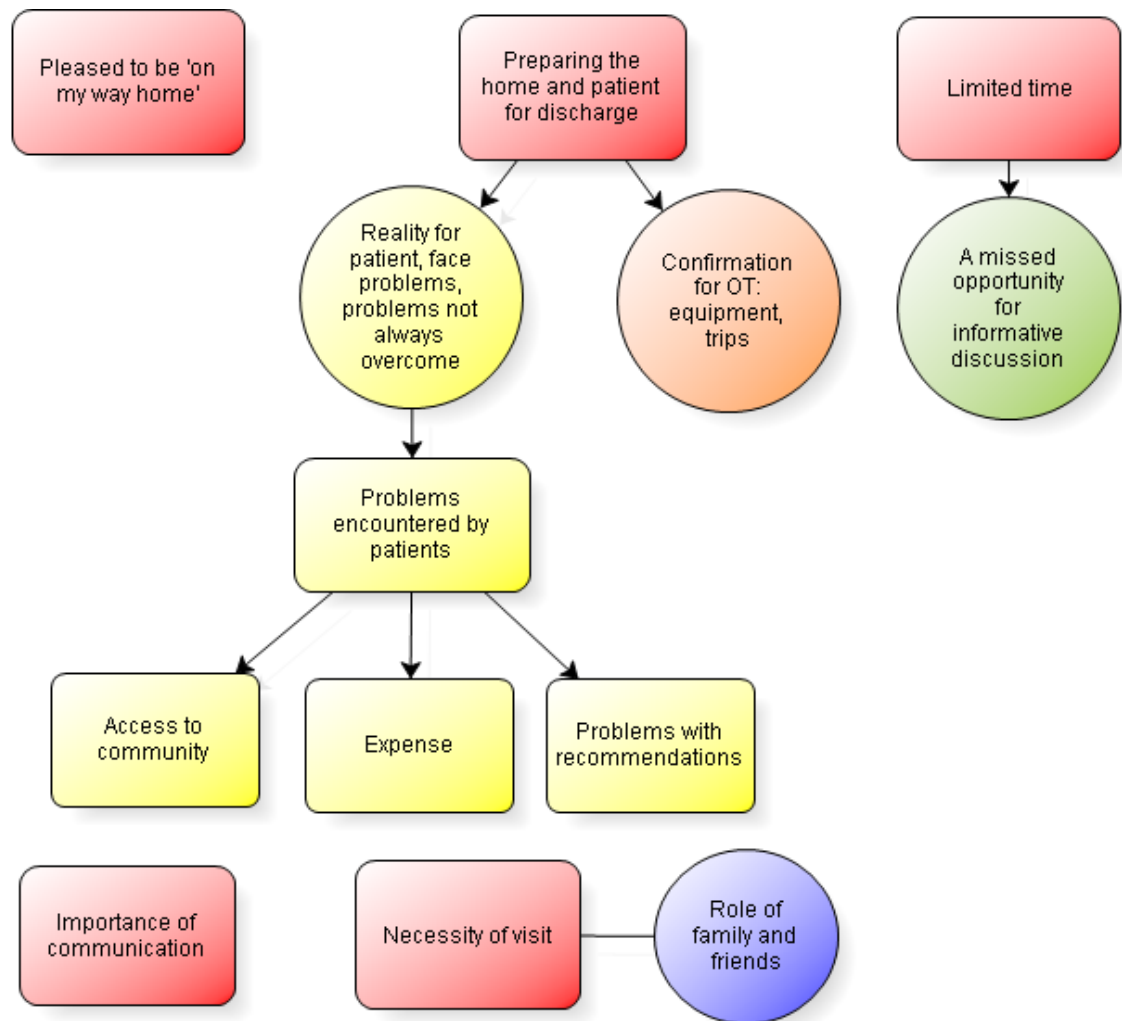
At this point of the analysis, the OTs' agenda for a home visit and how this related to the reality for the patient and their carers situation on their return home was further explored. The patient participants reported that recommendations made on the home visit were not always in place for discharge, or patients had encountered problems with regards to facilitating the actions, or with broken equipment. These findings were felt to describe the reality of the problems faced by patients on their return home, which the home visit may not have overcome. This raised a question mark for some of the patients as to whether the home visit was effective in preparing the patient for their

return home. The theme 'Preparing the patient and the environment for discharge', which encompassed the theme 'Realisation for the patient and/or the OT', was therefore developed. This was termed as a question, to reflect perceptions of what the OTs had aimed to achieve, and areas where the home visit had not been successful in preparing the patient for discharge home from hospital.

Following ongoing analysis the 'Importance of communication' and the 'Lack of time' themes were found to overlap, as a lack of time on the visit was perceived to account for less time to discuss concerns. However, the importance of communication reflected a more general theme, not only relating to home visits, but the discharge planning process in its entirety; it therefore had two separate meanings, with some overlaps. This was felt to be an important general message for the reader when considering how they communicate information to patients, who have had a stroke, and a theme that should be included.

The importance of a patient's family and social network had been evident throughout the analysis process, but when refining the themes and considering the meaning of this in terms of the value of the home visit for the patient, the necessity of the visit was perceived to be influenced by the social support a patient had on their return home from hospital. When referring to the need for a visit, those patients who were well-supported socially and who also perceived that they were set up to manage at home, did not believe a home visit was essential.

Figure 8: Patient participant refined themes



At this phase, the essence of each theme was defined and the meaning of each theme was described in detail. This included considering the assumptions the themes made, and the implications the theme had in relation to the value of home visits (Braun and Clarke, 2006: 94). Final refinements to the themes took place during this explanation. All of the quotations from each of the themes that had been stored in Nvivo 8 were reviewed, and the quotations that best reflected the essence of the themes were chosen, to draw together the narrative of the analysis.

Throughout this final phase the author had to reflect and compare the meaning of the two themes 'Preparing the patient and the home for discharge' and 'Necessity of the home visit'. The main questioning came from the overlaps in the narrative of those patients who have reduced social networks. Following ongoing questioning, it was concluded that, although there were overlaps in these themes, the 'Preparing a patient for home', had a different meaning to that of the 'Necessity of the visit'. This being that the preparation the home visit provides, may be limited for individuals who struggle to complete the recommendations identified by the home visit, with those individuals with less social support finding this more difficult. In comparison the narrative about social networks in the 'Necessity of the home visit' theme reflected the perception that home visits may be of more value to patients who have a limited social network on their return home, particularly those individuals who lived alone.

This final stage of writing up also highlighted the limited data for the 'Importance of communication' theme when compared to the other themes. The author reflected on the meaning of this theme, and did not feel it was specific enough to the value of home visits to warrant a theme. It was therefore, at this point, excluded from the findings.

Figure 9: Patient participant analysis defined themes

